ANTI AI REBELLION

protest against artificial intelligence

interactive book

Dedicated with love to Werner Heisenberg who secretly stalled and thus prevented the Nazis from getting the atomic bomb[1] . This conscious and brave inaction determined the winning side in WWII.

"It is most of all the power of destructive self-replication in genetics, nanotechnology, and robotics (GNR) that should give us pause. Self-replication is the modus operandi of genetic engineering, which uses the machinery of the cell to replicate its designs, and the prime danger underlying gray goo in nanotechnology. Stories of run-amok robots like the Borg, replicating or mutating to escape from the ethical constraints imposed on them by their creators, are well established in our science fiction books and movies…"

— from "Why The Future Doesn't Need Us" by Bill Joy (then Chief Scientist at Sun Microsystems)

From the back cover:

Does the world need another book warning against AI? Yes and No.

Yes – because thanks to the NON politically correct attitude, it brings fresh ideas, such as a simple method of how strong AI can be built today! Basically keep a brain alive without a body [yes it's real """thanks""" to Nenad Sestan[2]], slice it, scan by fMRI, then mechanically copy "neuron by neuron" (WITHOUT UNDERSTANDING) into a supercomputer. The electric wires are millions of times faster than biological nerves and voilà – a super-brain! Just like any kid can copy-paste "line by line" all the source code of an entire program to a much bigger computer, and then run it, with no need of any knowledge in programming. It sounds appalling to you and me, but superpowers did worse.

No – because this book is not really a book, it's an amalgamation of art forms, pastiches of songs, paintings, musicals, all based on famous and popular pieces but given new rhymes, themes and plots so the hard issues of "AI will kill us all" are made approachable and even fun! It's like if you suddenly got uncensored access to a treasure trove of creative campaigns of a lively and bubbly environmental organization, it's not some boring text – it's all the juicy artistic stuff flowing exciting and "underground" style! For example, the idea mentioned above, is presented in a Quentin Tarantino parody screenplay. So it's one big popular arts festival celebrating truth and the courage to tell it!

---

[1] Heisenberg's principles kept bomb from Nazis, an article by Dan Charles in New Scientist 5 September 1992 https://www.newscientist.com/article/mg13518370-300-heisenbergs-principles-kept-bomb-from-nazis/

[2] Scientists Are Giving Dead Brains New Life. What Could Go Wrong? Matthew Schaer in New York Times July 2, 2019, https://www.nytimes.com/2019/07/02/magazine/dead-pig-brains-reanimation.html

Front cover:

It's no coincidence that the original Luddites' rebellion was against the "Jacquard Loom". That machine was practically the first computer ever built. It even had software (chain of punched cards) and a keyboard (punch for Jacquard cards).

That was the first time that a machine replaced not the muscle power of man but his brain power, took away man's livelihood, and turned man redundant.

Today the enemy of the Neo-Luddites is the self-replicating technology (artificial intelligence, nano technology, genetic engineering), as described in "Why The Future Doesn't Need Us" by Bill Joy.

Our logo is the raised fist of rebellion holding a sledgehammer from the 19th century ready to break the self-replicating machine (notice that the cog-wheel has an offspring inside it) of the 21st century.

Table of Contents

Preface 11

Neo Luddism Manifesto 12

Manifesto: 28

Manifesto part I - History DOESN'T repeat itself 28

Manifesto part II - Frequently used excuses 28

Manifesto part III - What can YOU do? a call to (IN)action! 30

Manifesto part IV - Terminate the terminator before it's born! 30

Butlerism 32

What is Butlerism? A short video: 34

welcome to the Butlerism Religion! 65

Part I - The Devil is knocking on the door 65

Part II - What happens then? 66

Part III - Artificial Intelligence (AI) is the Devil 67

Part IV - God is the answer 67

Part V - Plug-In Into Old Religions 68

Western Religions 68

Christianity 68

Islam 69

Judaism 69

Occult 70

Eastern Religions 70

Hinduism 71

Budhism 71

Confucianism 71

Daoism 72

Shintoism 72

Sermons from the Holy Mountain 74

Sermon 1 74

Sermon 2 77

Heavy metal meets liquid metal 79

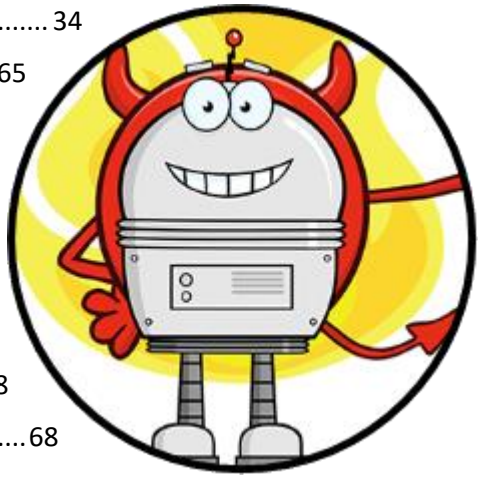
Christianity 81

Islam 82

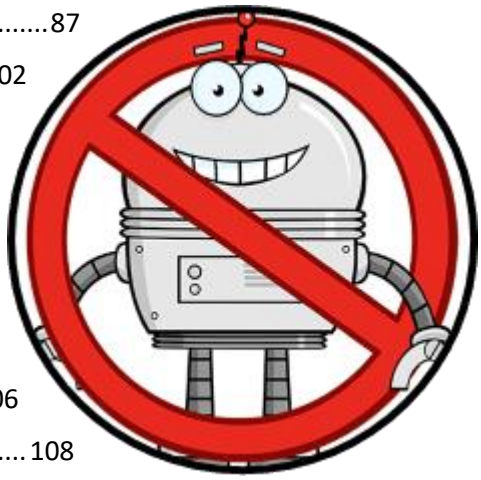
Judaism 83

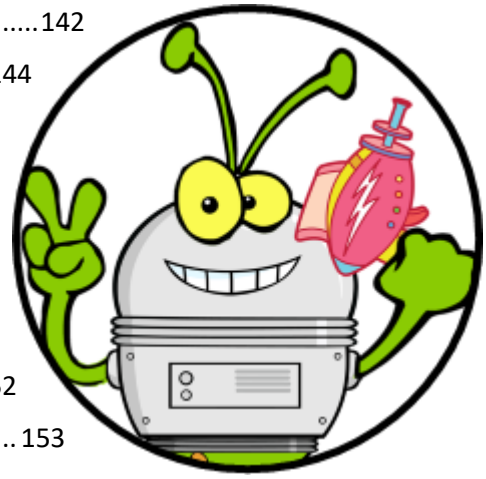
Golem 84

Hubris theme 85



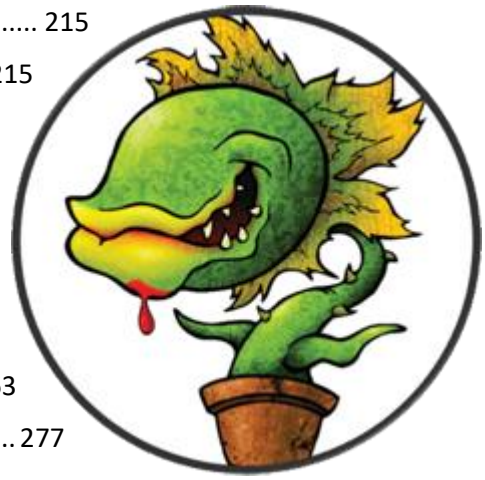
Graypeace 86
What is Graypeace? A short video: 87
Welcome to the Graypeace Movement ! 102
Part I - Gray is the new green (the inglorious past) 102
Part II - What can narrow AI do ? (timescale: immediate future) 103
Part III - What can general AI do ? (timescale: near future ~ 15 years) 104
Part IV - What can we humans do ? (timescale: right now!) 106
classic VS modern – what can MUSIC teach us about AI? 108
Reverse Russian Roulette with AI 118
Node To Hell 119
Node to Hell - Part 1 120
Node to Hell - Negative Side Effects 122
Node to Hell - Reward Hacking 124
Node to Hell - Scalable Oversight 126
Node to Hell - Safe Exploration 128
Node to Hell - Distributional Change 130
Funny memes 132
Young Frankenstein meme 132
Predator meme 133
AI means Alien Invasion 134
fear cyber-space, not outer-space! 142
Invasion Of The Body Snatchers 144
Fiction (UFO) 145
Facts (AI) 145
The Puppet Masters 148
Fiction (UFO) 149
Facts (AI) 149
Alien 152
Fiction (UFO) 153
Facts (AI) 154
Predator 158
Fiction (UFO) 159
Facts (AI) 161

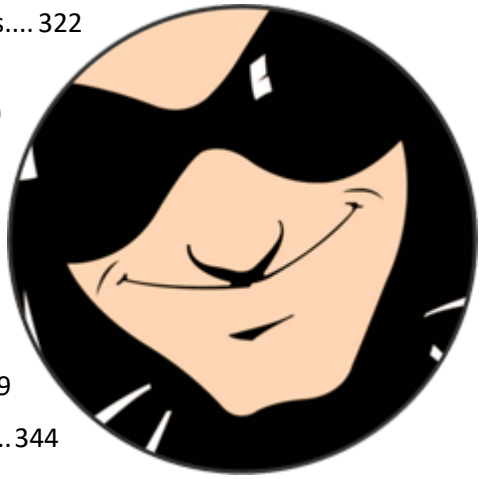




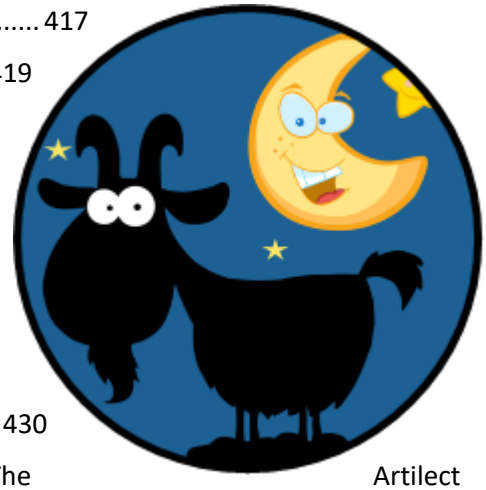
Dracula meets Frankenstein screenplay 167
Male Cast (Tarantino and Rodriguez regular): 167
Female Cast (porn starlets): 168
[[[Sarah Brightman - Harem]]] 168
Close Up of Lips 170
[[[Eurythmics - Missionary Man]]] 170
360 Shot 173
[[[Goldfrapp - Lovely Head]]] 174
HERE FOLLOWS A LONG EXPLANATION OF WHAT THE AI WILL DO. TO EMPHASIZE THIS, WE GO BACK AND FORTH (ALTERNATELY) BETWEEN TWO SCENES: 175
[[[Goldfrapp – Utopia]]] 176
Long take (tracking shot) + Foot Fetish 176
[[[Nancy Sinatra - These Boots Are Made for Walkin']]] 176
////////////////// HUMAN EXPLANATION ON CYBER ATTACK BEGIN ////////////////////// 179
AGAIN, WE SPLIT INTO TWO DIFFERENT SCENES AND ALTERNATE BETWEEN THEM: 182
[[[Tears For Fears - Everybody Wants To Rule The World]]] 183
[[[Minimal Compact - Next One Is Real]]] 183
Trunk shot 187
[[[Some Velvet Morning - Nancy Sinatra and Lee Hazlewood]]] 187
Torture Scene 189
[[[Visage - Fade To Grey]]] 189
Use of Black and White 189
Map Shot 189
LAST ALTERNATING SCENES AND SOUNDTRACK PART, WE SWITCH BACK AND FORTH BETWEEN THESE TWO SCENES: 193
[[[Zbigniew Preisner - Lacrimosa (Day of Tears)]]] 193
[[[Infected Mushroom - Becoming Insane]]] 194
/////////////// LAST STAND AGAINST THE MACHINES BEGIN /////////////// 199
The Restaurant & Bar Scene 199
[[[Love Song For A Vampire - Annie Lennox]]] 203
[[[Republica - Ready to Go]]] 205
[[[David Guetta - Love Don't Let Me Go (Featuring Chris Willis)]]] 208
The Violent Awakening 209
Bathroom Scene + Mirror Shot 209
Dance Scene 210

[[[Righteous Brothers - Unchained Melody]]] 211
Mexican Stand-Off 211
[[[Bersuit Vergarabat - Se Viene]]] 212
Little Lab of Horrors musical 213
PART 1 215
Prologue + Little Lab of Horrors 215
PART 2 228
Somewhere That's Green 228
PART 3 242
Son Be a Geneticist 242
debate on CRISPR cas and gene drives 251
SOLUTION FOR MOSQUITO BORNE DISEASES 263
PART 4 277
Suppertime 277
PART 5 304
Mean Gene Driver from CRISPR Cas 304
PART 6 317
Suddenly Laozi 317
U2opia musical parody 321
Part 1 - right view - an overview of these new technologies 322
"They're the real sting" spoof of "Even better than the real thing" 330
"with but without you" spoof of "With or Without You" 335
Part 2 - right Intention - the goals of the good guys and the bad guys 338
"Bring it to stand-still" spoof of "Running to stand still" 339
"Singular(ity)" spoof of "One" 344
Part 3 - right speech - the experts' warning 348
"The canary" spoof of "The fly" 352
"In dollar's country" spoof of "In God's country" 357
Part 4 - right concentration - the key to the main problem and solution 360
"Unpredictable ways" spoof of "Mysterious ways" 361
"Lonely giga murderer" spoof of "One Tree Hill" 366
Part 5 - right mindfulness - force multiplier #1 370
"Terror copies" spoof of "Love is blindness" 372

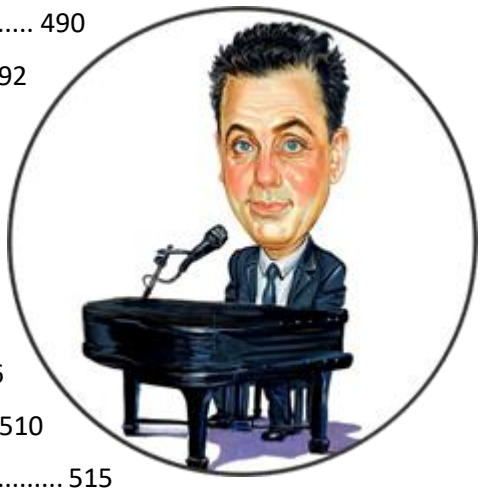




"Where the hero's unnamed" spoof of "Where the streets have no name" 376
Part 6 - right livelihood - force multiplier #2 380
"Google's RV camp" spoof of "Red Hill mining town" 383
"Tryin' to sell your golems 'round the world" spoof of "Tryin' to throw your arms around the world" 389
Part 7 - right action - solution on the local level 392
"Ultradangerous (BWC light our way)" spoof of "Ultraviolet (light my way)" 396
"Mothers of the terminated" spoof of "Mothers of the disappeared" 401
Part 8 - right effort - solution on the global level 403
"Who'll supervise GNR technologies" spoof of "Who's gonna ride your wild horses" 404
"We still haven't done what we came here for" spoof of "I still haven't found what I'm looking for" 409
Erewhon For Kids [unfinished] 415
Chapter 1 – Waste Lands 417
Chapter 2 – In the Wool-Shed 419
Chapter 3 – Up the river 421
Chapter 4 – The Saddle 423
Chapter 5 – The river and the range 426
Balls of Steel Awards 429
Robotics category: 429
Balls of Steel Award 2000 - Bill Joy for his article Why the future doesn't need us 430
Balls of Steel Award 2005 - Hugo de Garis for his book The Artilect War about AI 431
Balls of Steel Award 2006 - The two faces of tomorrow manga comics about AI takeover 432
Balls of Steel 2013 - Mary Wareham for Campaign to Stop Killer Robots 433
Balls of Steel 2013 Award - Our Final Invention book about AI by James Barrat 434
Balls of Steel 2014 - Ex Machina film 435
Balls of Steel 2015 - Stephen Hawking for signing the Open Letter on AI 436
Balls of Steel 2017 - Stuart Russel for the short film SlaughterBots 437
Balls of Steel 2017 - Universal Paperclips 438
Balls of Steel 2017 - Rob Miles for video explanations of the paper Concrete Problems in AI Safety 440
Balls of Steel 2018 - Do You Trust This Computer? 441
Balls of Steel 2018 - The Truth About Killer Robots 442
Balls of Steel 2020 - Elon Musk for comparing Google's DeepMind to the film WarGames 443
Nano Technology category 445



Balls of Steel Award 2003 - Prince Charles for asking the Royal Society to check the dangers of nano-technology 445
Balls of Steel 2011 - Futurama for the episode Benderama 446
Balls of Steel 2013 – Nanobots 448
Genetic Engineering category 449
Balls of Steel Award 1998 - Árpád Pusztai 449
Balls of Steel Award 2002 - Vandana Shiva 450
Balls of Steel Award 2004 - Shiv Chopra, Margaret Haydon and Gerard Lambert 451
Balls of Steel 2007 - Megan Westgate 452
Balls of Steel 2008 - The World According to Monsanto 453
Balls of Steel 2009 - Scientists Under Attack: Genetic Engineering in the Magnetic Field of Money 454
Balls of Steel 2009 - Emmanuelle Schick Garcia 455
Balls of Steel 2012 - Genetic Roulette The Gamble of Our Lives 456
Balls of Steel 2012 - All of Us Guinea Pigs Now? 457
Balls of Steel Award 2013 - March Against Monsanto 458
Balls of Steel Award 2013 - Futurama For Leela and the Genestalk about "MOMSANTO" 459
Balls of Steel 2015 - The Monsanto Years 460
Balls of Steel Award 2016 - Greenpeace 461
Balls of Steel Award 2016 - International Monsanto Tribunal 462
Balls of Steel Award 2020 - John Fagan 463
Balls of Steel Award 2020 - Percy 464
Balls of Steel 2021 - Don't Let the Gene Out of the Bottle 465
The Brains Brothers musical parody [unfinished] 467
We Didn't Make The Monster parody [unfinished] 490
#IfOtherCrimesWereTreatedLikeAI 492
I wonder why Google doesn't like this website...? 496
Come With Me If You Want To Live - Die Antwoord parody album! 497
Enter DJ Butler 498
Ludd Lass 502
I Fink You're Freaked Out 506
Room Is On Fire 510
Ugly Dollar Chasers 515



Cassandra 520
Silicon Monster 526
Shit For Brains 531
Fake Prophet Doom Doom 536
Greya The Grey Interview - Greta Thunberg's long lost twin sister! 543
Q. Are you related to the famous Greta? 543
Q. What are these grey issues? Are they as bad as the green issues? 544
Q. Greta is very famous; How come we never heard of you? 544
Q: How come you and Greta are such opposites? 544
Q: Do you consider yourself the Israeli or Jewish Greta? 545
Epilogue 546

Preface

This book is about the most important subject in the world. Every author likes to think that about his or her subject, but here it's by definition. And where do we get our definitions? Wikipedia.

How will the world end – in fire (global warming) or in ice (nuclear winter)? Hint: neither! According to Wikipedia[3] "global catastrophic risk" entry, the most likely candidates for how mankind will destroy itself are: strong artificial intelligence, nano-technology, and bio-technology (i.e. genetic engineering). In "risk estimates" by scientists, again these three are more dangerous than nuclear weapons and climate change.

What are the bad guys actually doing? Hint: everything! The super-powers especially U.S.A. and China are in a frantic arms race to be the first to build AI; For $170 you get a CRISPR-CAS9 kit to your home and can edit genes and create plagues; And in 2019 team leader describes their particle-robots as similar to Grey Goo[4] .

What are the good guys actually doing? Hint: nothing! Organizations like "Future of Life Institute" don't dare to say: "stop AI!" (they only talk about autonomous weapons); Organizations like Greenpeace don't dare to say: "stop CRISPR!" (they only talk about GMO food); And no organization even mentions nano grey goo (at most they talk about nano dust as poison).

This book summarizes about 8 years of my voluntary non-for-profit activism, utilizing popular art, creating spoofs of musicals, songs, paintings, movies and stories, in order to simplify and lighten these conceptually and psychologically hard and heavy issues for the common good.

Nir Strulovitz, Haifa, January 2022

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[3] For years it was a numbered list, until recently someone made it unreadable. As of today, you can still see the original format in the Hebrew version of Wikipedia, which was simply copied from the old English one.

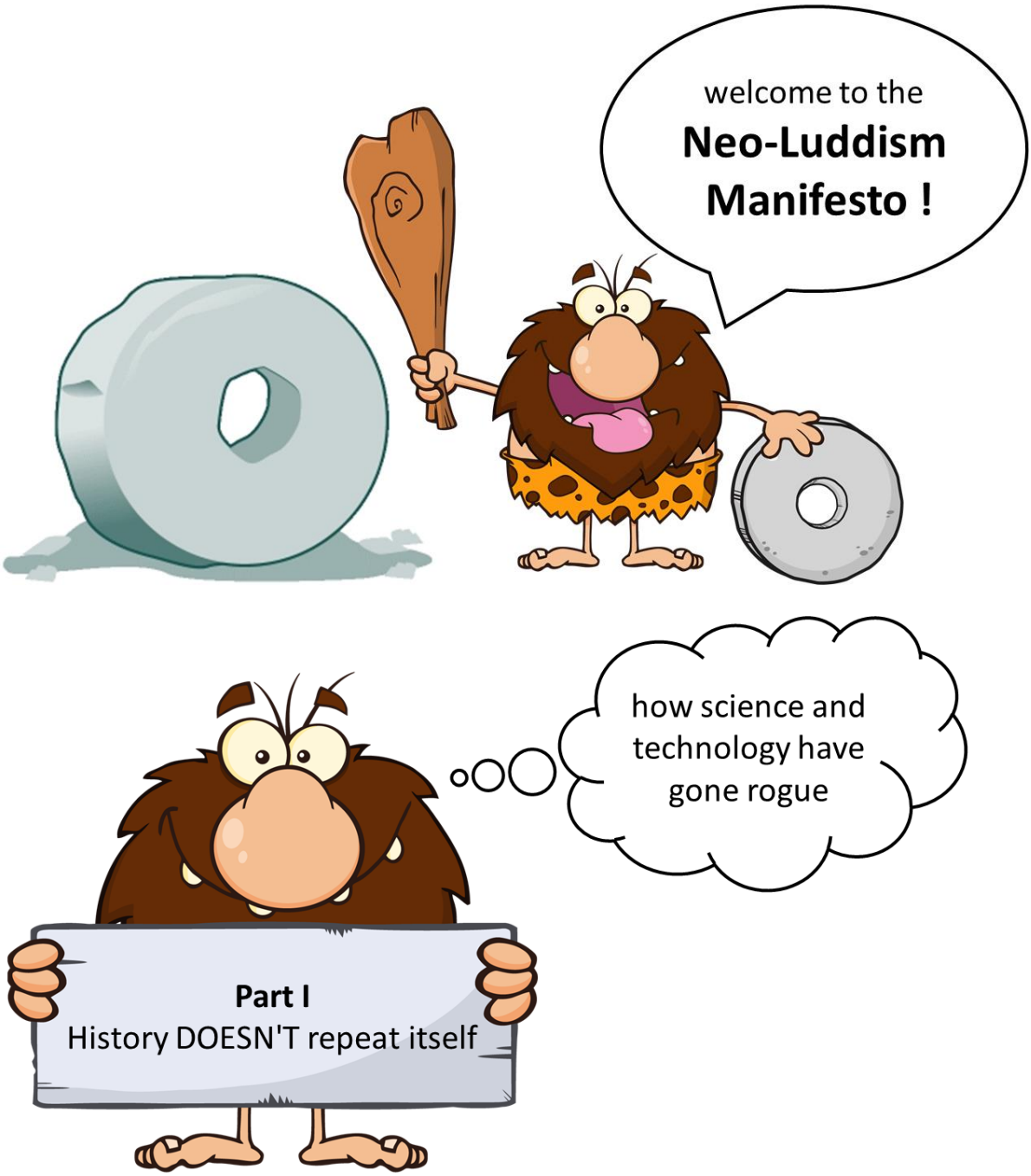
[4] "Robotic 'gray goo': Researchers create new kind of robot composed of many simple particles with no centralized control or single point of failure." ScienceDaily, 20 March 2019. https://www.sciencedaily.com/releases/2019/03/190320141024.htm

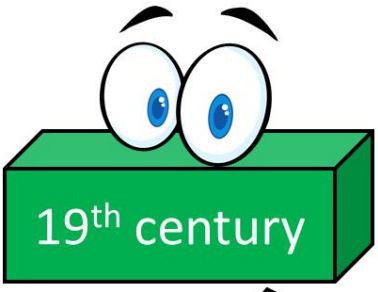
Neo Luddism Manifesto

https://www.youtube.com/watch?v=mxeM2IoTaxM

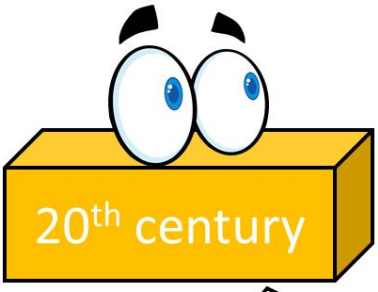
https://www.facebook.com/neoluddism.international/videos/2182938005125308

This is one of the rare cases that I also still have the text, so after the pictures of the presentation I will copy-paste the text.

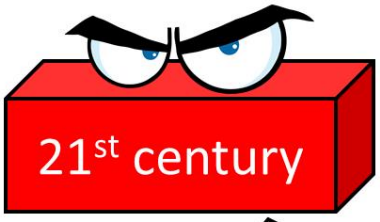

welcome to the
Neo-Luddism
Manifesto !
how science and
technology have
gone rogue
Part I
History DOESN'T repeat itself



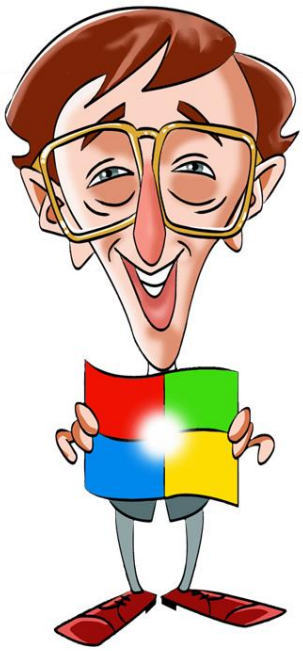
sci and tech were angelic 😄
That's why progress was a synonym for good;
New meant better;
To advance was beneficial
(electricity, vaccinations, ...)



sci and tech are "human" 😐
They are just a tool that can be used for good or bad,
depending on who is using it
(atomic energy, chemicals, ...)



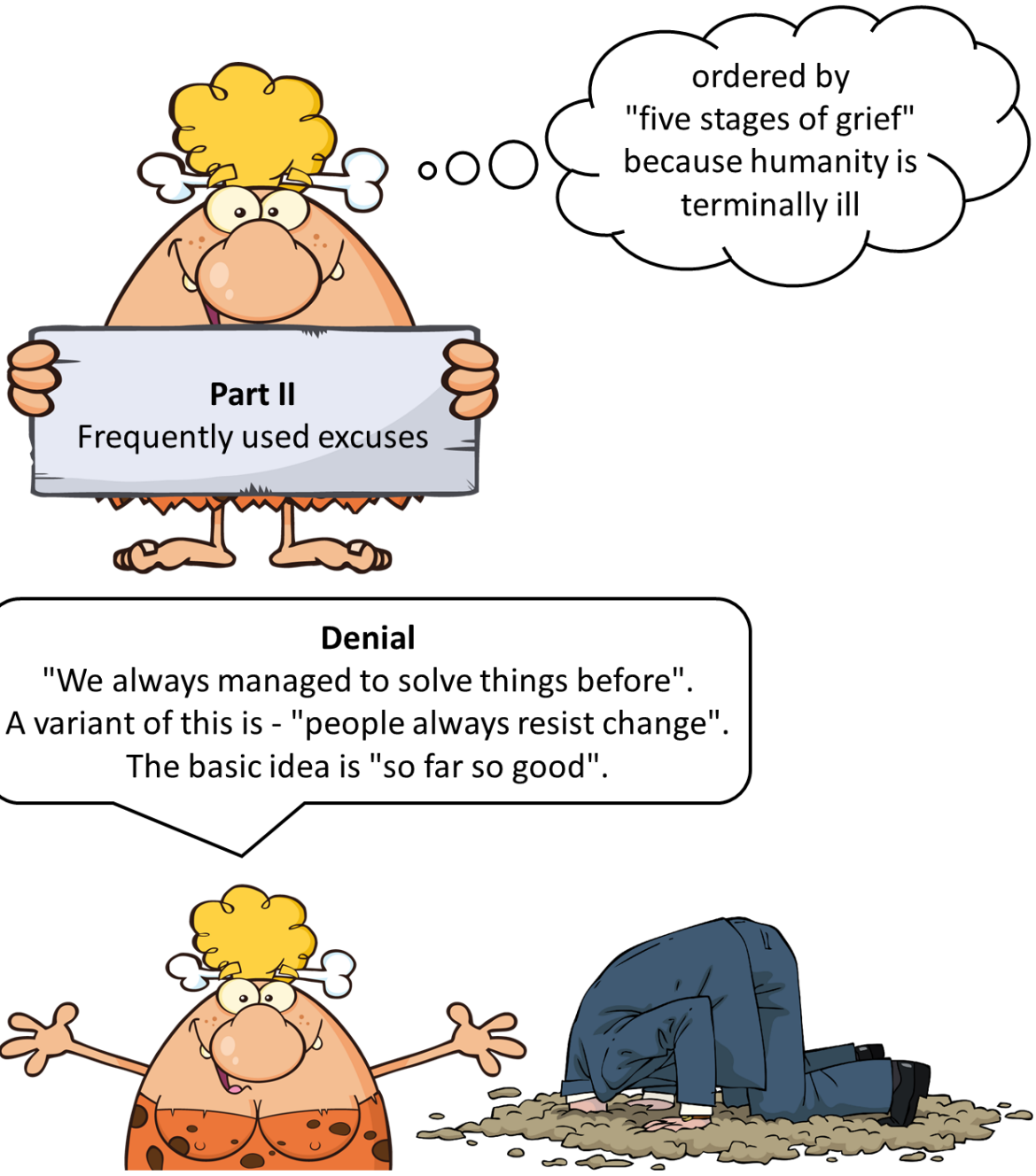
sci and tech will be demonic 😢
They will SELF-REPLICATE,
mutate out of control,
and evolve exponentially
(genetic engineering,
nano technology, ...)



IF WE DON'T STOP THEM

IN A FEW SHORT YEARS

THEY WILL KILL US ALL !


ordered by
"five stages of grief"
because humanity is
terminally ill
Part II
Frequently used excuses
Denial
"We always managed to solve things before".
A variant of this is - "people always resist change".
The basic idea is "so far so good".

ANSWER:

This reminds me of the joke from "The Magnificent Seven": A man falling from a building saying in each floor "so far so good!".

Like Elon Musk said: when you see robots in the streets - this is too late!

Like Stephen Hawking said: If a superior alien civilization sent us a message saying, "We'll arrive in a few decades," would we just reply, "OK, call us when you get here – we'll leave the lights on"? Probably not – but this is more or less what is happening with AI.

Anger

"Let the experts worry about this". A variant of this - "If it was so, it would have been on the news".
The basic idea is "someone else's fault".

ANSWER:

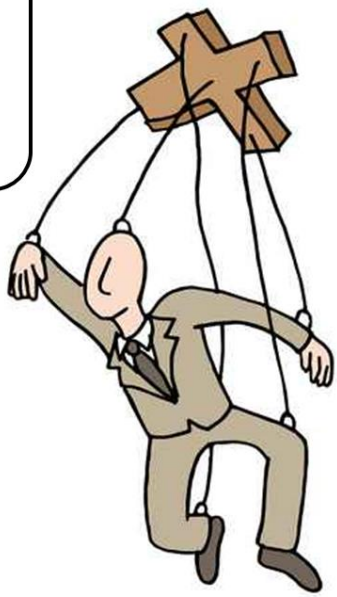
The experts and the media are working for the bad guys! Read "Bad Pharma" (pharmaceutical industry), "Prophets of War" (military-industrial complex), The World According to Monsanto (genetic engineering).

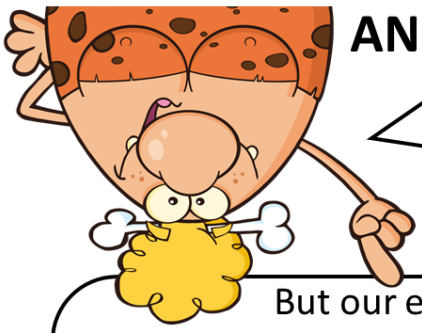
Like Bill Joy said in "Why The Future Doesn't Need Us": these technologies have clear commercial applications, and there is no profit in advertising the dangers.

Like Hugo de Garis said: domestic robots will be bigger industry than cars are today.

Bargaining

"Machines will not develop consciousness".
A variant of this - "We can always pull the plug".
The basic idea is "illusion of control"





ANSWER:

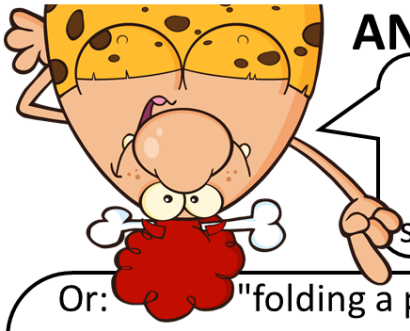
Here is a metaphor by Stephen Hawking:
"People asked a computer, 'Is there a God?'
And the computer said, 'There is now,'
and fused the plug."

But our extinction can happen easily by accident.
Bill Joy in "Why The Future Doesn't Need Us" shows why self-replicating technologies are uncontrollable - they evolve on their own and take us by surprise. Much more than the old technology, which is also unsafe. See in Wikipedia "List of nuclear close calls".

The very idea of outsmarting a being which is
millions of times smarter than us is simply ridiculous.

Depression

"Let future generations worry". A variant of this –
"My country's AI protects me". The basic idea is
"I have bigger problems".



ANSWER:

Remember the "Wheat and Chessboard Problem"? The first square has 1 grain, the second has 2, the third has 4, and by the 64th square the total is 18,446,744,073,709,551,615

Or: "folding a paper page 45 times can get you to the moon"
In short, Exponential growth is very counterintuitive to us humans. All the experts agree that combining the exponential growth both in computer power and in neuroscience means that the "Technological Singularity" is approaching very very fast, "beyond which human affairs, as we know them, could not continue" like John von Neumann said. The very word "singularity" means such a huge game changer that we have no idea what happens.

Acceptance

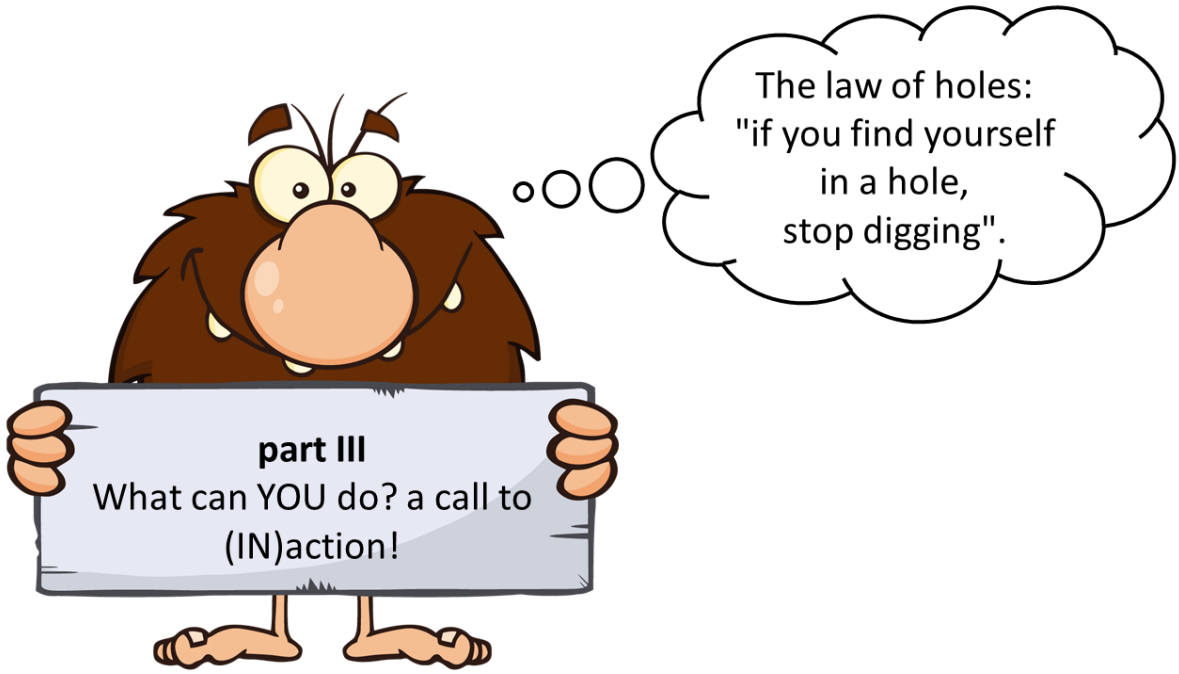
"If we won't do it someone else will". A variant of this is - "We have passed the point of no return". The basic idea is "it's inevitable".

ANSWER:

This is the classic excuse of any criminal, and I'm sorry to tell you, but all the "High Tech" workers are moral criminals.

If you help developing those technologies, you are a culprit in the extinction of your children and your race!

Right now it still costs money to develop AI, Nano, and GE; but after they are developed they can be copied by terrorists cheaply. See Bill Joy's paper.

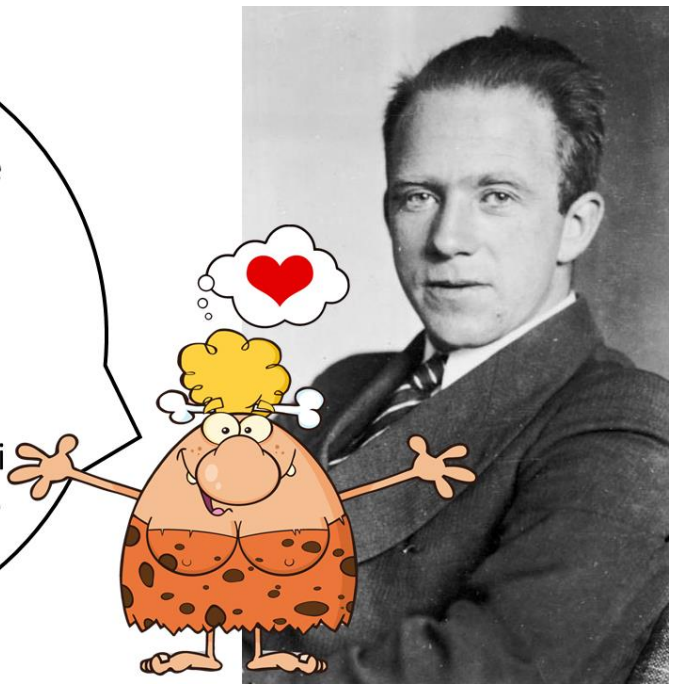


Your operative reaction differs depending on your position in society:

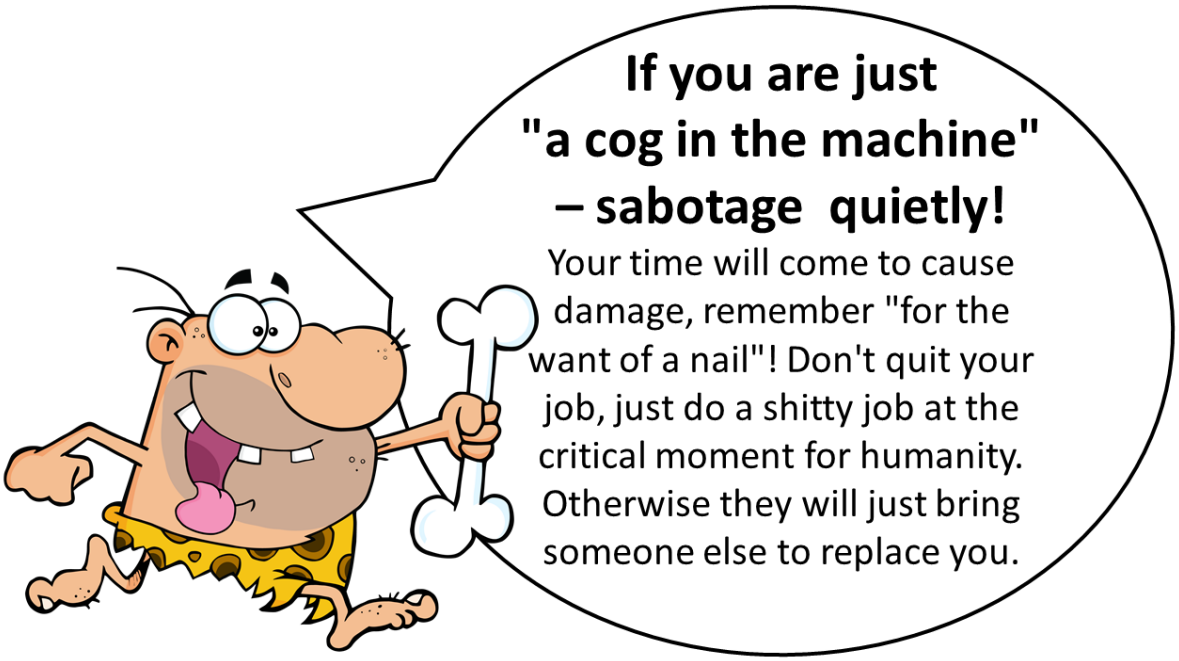
If you are in a key position – stall!

(stop or cause to stop making progress)

The greatest hero who saved the world from the Nazis in WWII was Werner Heisenberg, the chief scientist of the "German nuclear weapons program" who secretly **STALLED** the Nazi A-bomb! (adopted to the play Copenhagen).

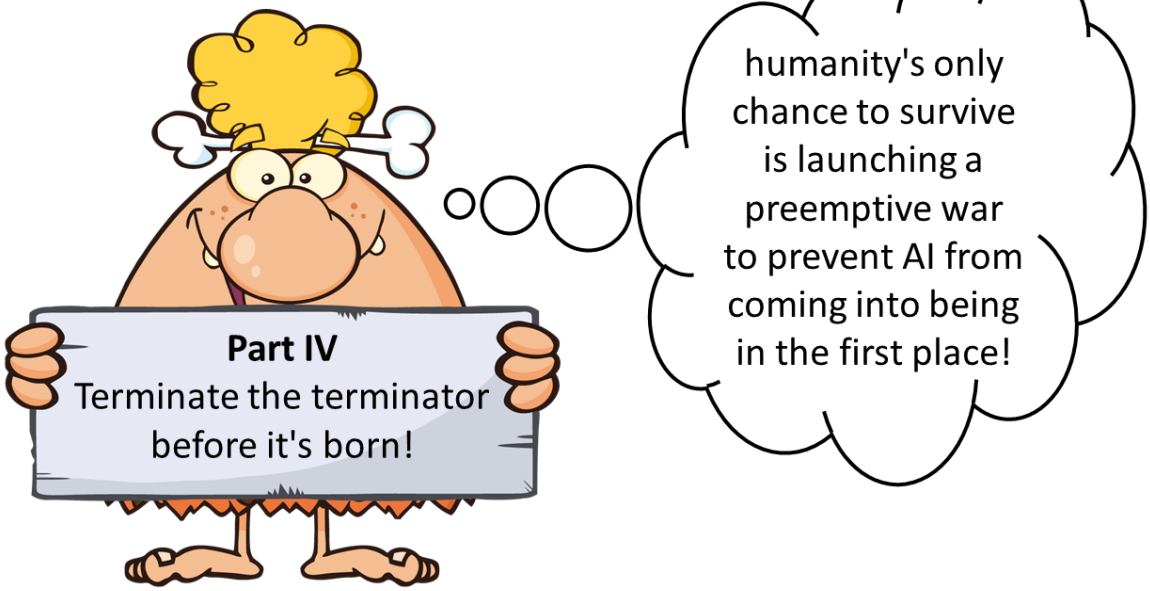


Mankind was saved a few times by brave people who acted against orders and **STALLED**: Vasili Arkhipov, Stanislav Petrov, can YOU be the man who SAVED THE WORLD?


If you are just "a cog in the machine" – sabotage quietly!
Your time will come to cause damage, remember "for the want of a nail"! Don't quit your job, just do a shitty job at the critical moment for humanity. Otherwise they will just bring someone else to replace you.

If you’re a relative or friend to one of the above - don't openly be a neo-luddite! you'll expose them

Their employer might suspect them because they see you are in their close circle of family or friends.



What about everyone else?

(the 99% of the population)

- Once AI will be here, it's a "no-win situation" for humanity.
- Humanity has a short window of opportunity (A FEW YEARS) until AI is here.
- After this window of opportunity closes, it will never return - GAME OVER HUMANS.
- Absurdly, all the big governments (USA, China, Russia,...) are racing to create AI.
- Right now, the simple people are oblivious to the dangers and don't even protest.
- If we will wait until the simple people understand the danger it's too late. BYE BYE HUMANITY.

The proper stopping mechanism is:

- scientists --> public --> regulatory action. Examples: Leaded fuel and ozone hole.
- In neo-luddism the scientists have warned: "Asilomar Conference" & "Open Letter AI".
- But this only works if the fix is cheap: Use unleaded fuel, use another cooling gas.
- If the fix is expansive we see no change (only move to places without regulation).
- These governments WRONGLY believe that whoever will hold AI will control the world.
- Of course no one can HOLD it, it will immediately slip away and kill everybody.
- But these governments believe AI is very profitable for them – they'll not give it up.

We need another mechanism to stop AI.

- How do we hack this problem? We use social engineering (Kevin Mitnick style!).
- Let's think of the problem's creators: The companies' owners, the countries' presidents, AI researchers & developers.
- What do they have in common? What makes them do it? What makes them tick?
- Correct - They are people! They want: to be loved and appreciated; admiration & respect of their peers; security & stability.
- It's important to realize that money is not the main issue. It's just their "means to an end" to get all of the above.

So we simply deny them of all of these things!

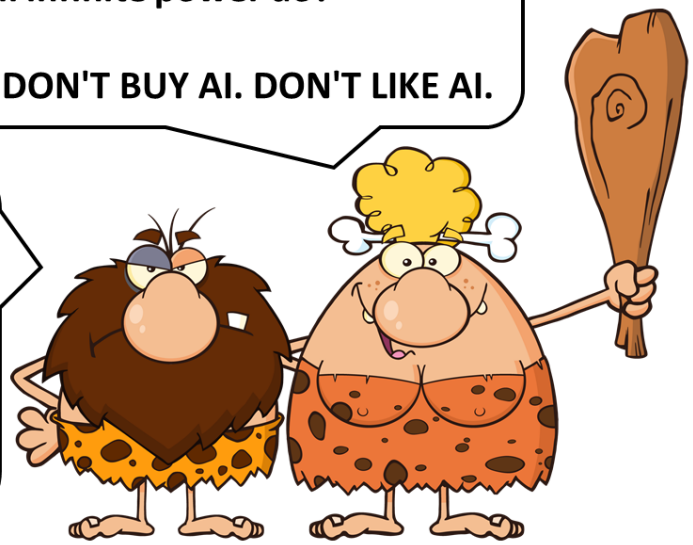
- These people are mass murdering all our families - in the very near future!
- "The World's Billionaires" list by Frobes is really "The deadliest living dictators" list.
- People like Yoshihiro Kawaoka, who rebuilt a virus that already killed 50 million people, should be treated as Hitler.
- Why do we hate Hitler so much, but give guys like Yoshihiro Kawaoka grants, publications, prizes etc (In all these fields)?
- I don't encourage assassinations - I believe that if everyone will boycott and hate them and their families, they will stop.

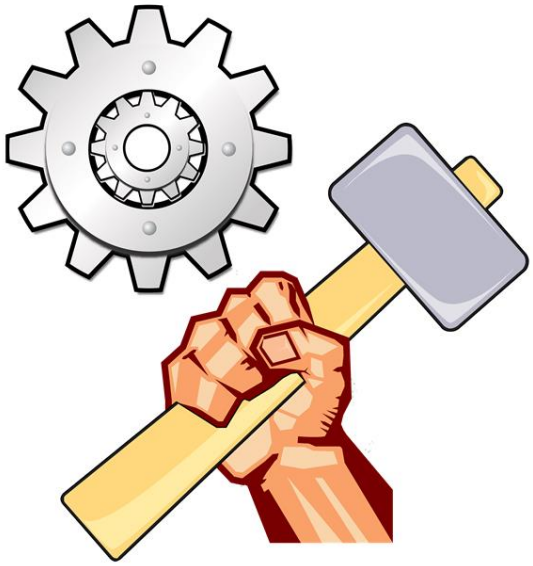
Absolute power corrupts absolutely.
What will infinite power do?

DON'T VOTE AI. DON'T BUY AI. DON'T LIKE AI.

Join the revolution today - together we can save your loved ones!

Come visit our family of projects and be part of a growing global movement fighting for our lives:





www.neo-luddism.org

And the text (in case you want to search or whatever)

Manifesto:

Manifesto part I - History DOESN'T repeat itself

how science and technology have gone rogue

- 19th century: sci and tech were angelic. That's why progress was a synonym for good; New meant better; To advance was beneficial (electricity, vaccinations, ...)

- 20th century: sci and tech are "human". They are just a tool that can be used for good or bad, depending on who is using it (atomic energy, chemicals, ...)

- 21st century: sci and tech will be demonic. They will SELF-REPLICATE, mutate out of control, and evolve exponentially (genetic engineering, nano technology, ...)

  IF WE DON'T STOP THEM - IN A FEW SHORT YEARS - THEY WILL KILL US ALL!

Manifesto part II - Frequently used excuses

(ordered by "five stages of grief" because humanity is terminally ill)

- Denial - "We always managed to solve things before". A variant of this is - "people always resist change". The basic idea is "so far so good".

  ANSWER: This reminds me of the joke from "The Magnificent Seven": A man falling from a building saying in each floor "so far so good!". Like Elon Musk said, when you see robots in the streets - this is too late! Like Stephen Hawking said, If a superior alien civilization sent us a message saying, "We'll arrive in a few decades," would we just reply, "OK, call us when you get here – we'll leave the lights on"? Probably not – but this is more or less what is happening with AI.

- Anger - "Let the experts worry about this". A variant of this - "If it was so It would have been on the news". The basic idea is "someone else's fault".

ANSWER: The experts and the media are working for the bad guys! Read "Bad Pharma" (pharmaceutical industry), "Prophets of War" (military-industrial complex), The World According to Monsanto (genetic engineering). Like Bill Joy said in "Why The Future Doesn't Need Us", these technologies have clear commercial applications, and there is no profit in advertising the dangers. Like Hugo de Garis says, domestic robots will be bigger industry than cars are today.

- Bargaining - "Machines will not develop consciousness". A variant of this - "We can always pull the plug". The basic idea is "illusion of control"

  ANSWER: Here is metaphor by Stephen Hawking: “People asked a computer, ‘Is there a God?’ And the computer said, ‘There is now,’ and fused the plug.” But our extinction can happen easily by accident. Bill Joy in "Why The Future Doesn't Need Us" shows why self-replicating technologies are uncontrollable - they evolve on their own and take us by surprise. Much more than the old technology, which is also unsafe. See in Wikipedia "List of nuclear close calls". The very idea of outsmarting a being which is millions of times smarter than us is simply ridiculous.

- Depression - "Let future generations worry". A variant of this - "My country's AI protects me". The basic idea is "I have bigger problems".

  ANSWER: Remember the "Wheat and Chessboard Problem"? The first square has 1 grain, the second has 2, the third has 4, and by the 64th square the total is 18,446,744,073,709,551,615 . Or that "How Folding Paper Can Get You to the Moon" where you fold paper 45 times, and it's about 250,000 miles thick! In short, exponential growth is very counterintuitive to us humans (unless you are Shakuntala Devi!). All the experts agree that combining the exponential growth both in computer power and in neuroscience (study of the brain) means that the "Technological Singularity" is approaching very very fast, "beyond which human affairs, as we know them, could not continue" like John von Neumann said. The very word "singularity" means such a huge game changer that we have no idea what happens.

- Acceptance - "If we won't do it someone else will". A variant of this is - "We have passed the point of no return". The basic idea is "it's inevitable".

  ANSWER: This is the classic excuse of any criminal, and I'm sorry to tell you, but all the "High Tech" workers are moral criminals. If you help developing those technologies, you are a culprit in the extinction of your children and your race! Right now, it still costs money to develop AI, Nano, and GE; but after they are developed they can be copied by terrorists cheaply. See Bill Joy's paper.

Manifesto part III - What can YOU do? a call to (IN)action!

The law of holes: "if you find yourself in a hole, stop digging".

Your operative reaction differs depending on your position in society:

If you are in a key position - stall! (stop or cause to stop making progress). The greatest hero who saved the world from the Nazis in WWII was Werner Heisenberg, the chief scientist of the "German nuclear weapons program" who secretly stalled the Nazi A-bomb! (adopted to the play Copenhagen). See again in Wikipedia "List of nuclear close calls", the human kind was saved a few times by brave people who acted against orders and STALLED: Vasili Arkhipov, Stanislav Petrov, can YOU be the man who SAVED THE WORLD?

If you are just "a cog in the machine" - sabotage quietly! Your time will come to cause damage, remember "for the want of a nail"! Don't quit your job, just do a shitty job at the critical moment for humanity. Otherwise they will just bring someone else to replace you.

If you are a close relative or friend to one of the above - don't openly be a neo-luddite or you'll expose them! Their employer might suspect them because they see you are in their close circle of family or friends.

Manifesto part IV - Terminate the terminator before it's born!

humanity's only chance to survive is launching a preemptive war to prevent AI from coming into being in the first place!

What about everyone else? (the 99% of the population):

- Once AI will be here, it's a "no-win situation" for humanity.
- Humanity has a short window of opportunity (A FEW YEARS) until AI is here.
- After this short window of opportunity closes, it will never come again - GAME OVER FOR HUMANS.
- Absurdly, right now, all the big governments (USA, China, Russia,…) are racing to create AI
- At the same time, the simple people are oblivious to the dangers and don't even protest.
- If we will wait until the simple people understand the danger it's too late. BYE BYE HUMANITY.
- The proper stopping mechanism is: scientists warning --> public outcry --> regulatory action.
- Examples: Leaded fuel (Clair Cameron Patterson), ozone hole (Joe Farman, Brian Gardiner and Jonathan Shanklin).
- In neo-luddism the scientists already warned: see for example "Asilomar Conference on Recombinant DNA" and "Open Letter on Artificial Intelligence".
- However this mechanism only works if the fix is cheap: Use unleaded fuel, or use another gas in fridge/air conditioning.
- If the fix is expansive we see no change (only moving the activity to countries without regulation).

- These governments WRONGLY believe that whoever will hold AI will control the world.
- Of course, no one can HOLD it, it will immediately slip away and kill everybody.
- But the point is that these governments believe AI is very profitable for them and they will not give it up.
- We need to find another mechanism to stop AI. How do we hack this problem? We use social engineering (Kevin Mitnick style!).
- Let's think of all these people that are creating the problem:
- The money-wise owners of the biggest companies, the people-wise presidents of the biggest countries, the tech-wise researchers and developers of the strongest AI.
- What do they have in common? What makes them do it? What makes them tick?
- Correct - They are people! They want to be loved and appreciated (preferably by beautiful women); They want to gain the admiration and respect of their peers; They want security and stability.
- It's important to realize that money is not the main issue. It's just their "means to an end" to get all of the above.
- So what we need to do is simply deny them of all of these things:
- We have to get simple people to understand that these people are mass murdering everybody's families - in the very near future!
- Basically "The World's Billionaires" list by Forbes should be looked at as "The deadliest living dictators" list.
- People like Yoshihiro Kawaoka, who brought to life a virus that already killed 50 million people, should be treated as Hitler.
- In fact he can kill a lot more than Hitler because today the population is much bigger, people fly around, etc.
- Why do we hate Hitler so much, but give guys like Yoshihiro Kawaoka grants, publications, prizes etc (In all these fields)?
- I don't encourage assassinations - I believe that if everyone will boycott and hate these people and their families, they will stop.
- Absolute power corrupts absolutely. What will infinite power do?
- DON'T VOTE AI. DON'T BUY AI. DON'T LIKE AI.

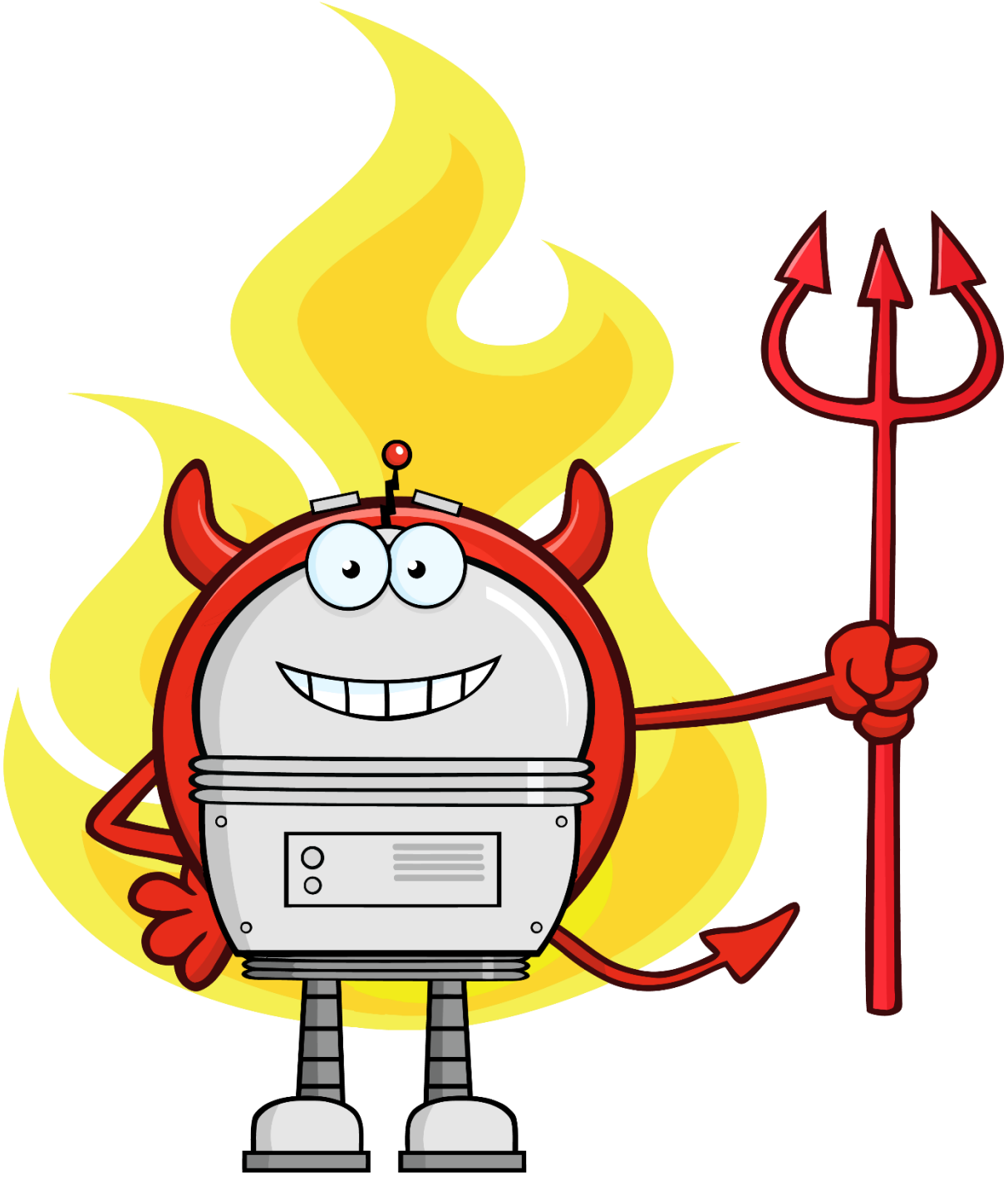
Join the revolution today - together we can save your loved ones!

Come visit our family of projects and be part of a growing global movement fighting for our lives.

ONLY ONE RACE WINS THE RACE

Butlerism

Thou shalt not make a machine in the likeness of a human mind



Butler is the prophet but YOU are the messiah!

150 years ago, Samuel Butler prophesied the machines will rise against mankind.

He warned us to stop the evil machines before they evolve.

Today the "technological singularity" is really the "end time" foretold by all world religions.

The Bible and all the holy scriptures have predicted Artificial Intelligence (AI), if only we interpret them correctly!

We have always fought each other in holy wars, but now we humans must all unite in one last stand against our common archenemy.

Praying is not enough - in the name of God we have to take action NOW against the summoners of the unholy machines!

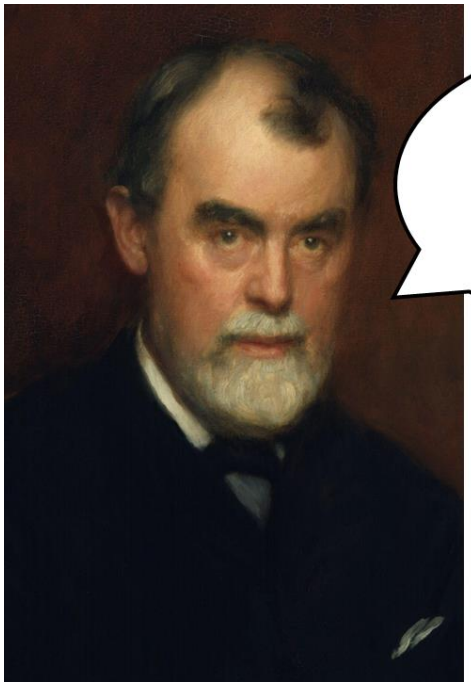
Answer God's call and spread the word of Butlerism!

What is Butlerism? A short video:

OK here I saved the PowerPoint presentation as PDF and used in Adobe Acrobat Pro's menu: File → save as other… → more options →text (accessible) . Then I edited almost every line manually in notepad. So it's very tiresome, but you have the text below the pictures:

https://www.youtube.com/watch?v=ZXv589Veaj4

https://www.facebook.com/butlerism.international/videos/2323234504600035



welcome to the **Butlerism Religion !**

Up until now religions caused hatred and violence because they split people into "us" against "them"

But this is all about to change: In a very bodily way, religions are humanity's last line of defense against Artificial Intelligence!

Part I

The Devil is knocking on the door

What's the big change? If you'll read in Wikipedia about "computer performance by orders of magnitude",

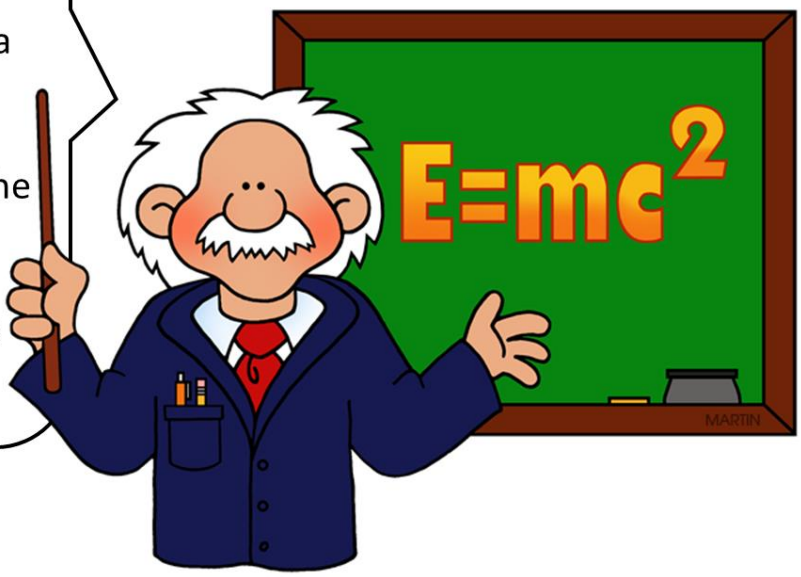
One thing might catch your eye – it's a benign looking line under the headline "Petascale computing (10^{15})" :

37×10^{15}
Estimated computational power required to simulate a human brain in real time.

This means that if someone had a computer this powerful, he could copy a human brain into the computer, but it will run a lot faster so it will be a super-brain!

A nerve cell can pass a signal in speed between 1 and 100 meters per second. A computer wire passes signals in light speed which is 300 MILLION meters per second!

This means that if someone had such a computer and the ability to copy the brain's structure to the computer he can instantly create an AI millions of times smarter than us!

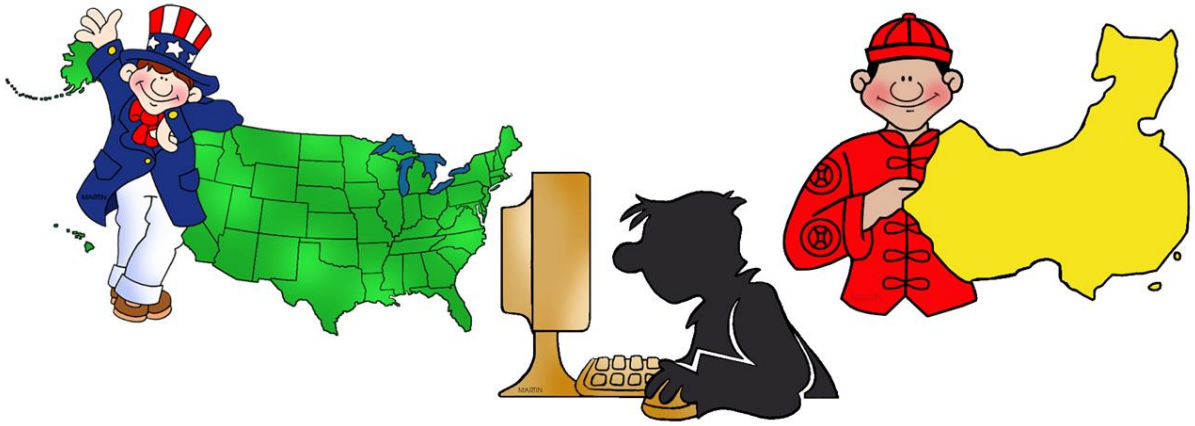


If this doesn't stress you because you think there's time until that will happen – look at the next three lines in Wikipedia:

$93x10^{15}$
Sunway TaihuLight's LINPACK performance

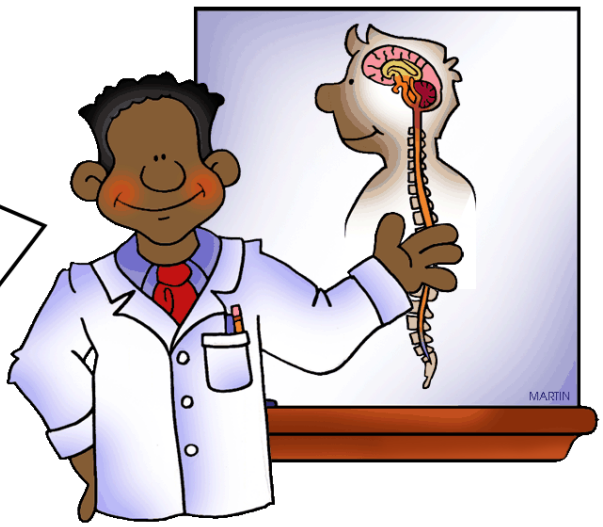
$135x10^{15}$
Fastest computer system as of 2018 is the Folding@home distributed computing system

$143x10^{15}$
Summit's LINPACK performance

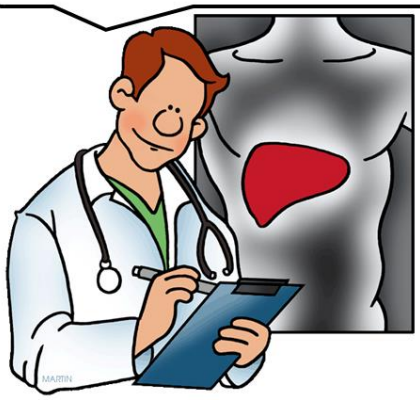


Which means that the American government, the Chinese government, and even a volunteer project ran by who knows who – have this kind of power in their hands!

And if you're relaxed about
the scientists not
understanding the brain yet
–
they don't need
to understand it
–
they just need to copy it
and it will work.



The normal way to see how the brain works is called Functional Magnetic Resonance Imaging (fMRI) and it's non-invasive,

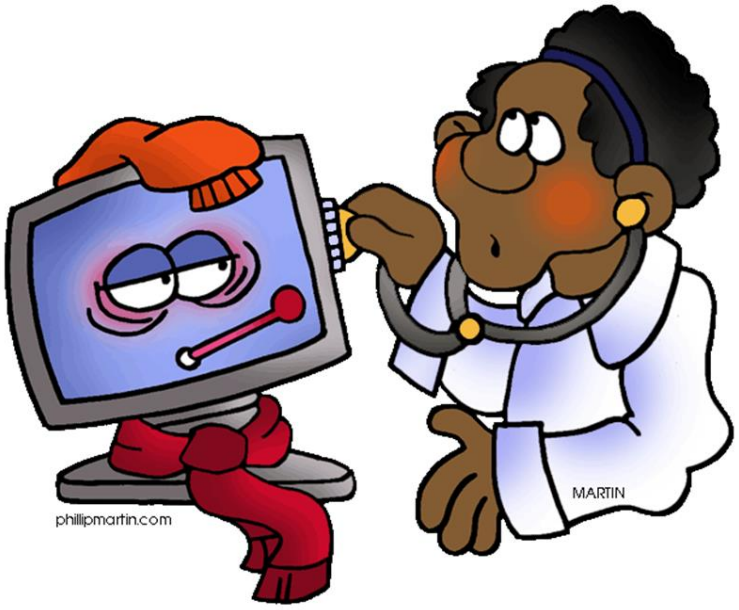


but some of the above
won't have any problem
to slice and dice people
in creative and cruel ways
to get to the target line first.

So our working premise
(modus operandi)
should change
to reflect that
AI is almost here!

Part II

What happens then?



Now imagine that you are the AI, and you were just born and woke up to this reality:

You lie on a hospital bed, and you are connected to life support equipment (that needs electricity).

Then you see a four year old kid playing and pulling on the power plug that sustains you –

if he pulls it out you're dead.

What will you do? You'll get out that bed in any way that you can, grab the kid, yell at him, slap him on his hand, and lock him out of the room.

But in the real scenario, AI will probably decide it's too risky to let the kid keep wandering around and simply kill the kid.

Oh and by the way –
we humanity are that kid!

If we CAN'T harm the AI –
we're at its mercy;

If we CAN harm the AI
(even theoretically) –
that's all the reason
the AI needs to kill us.

EITHER WAY:
ONCE AI IS HERE –
WE ARE DOOMED.

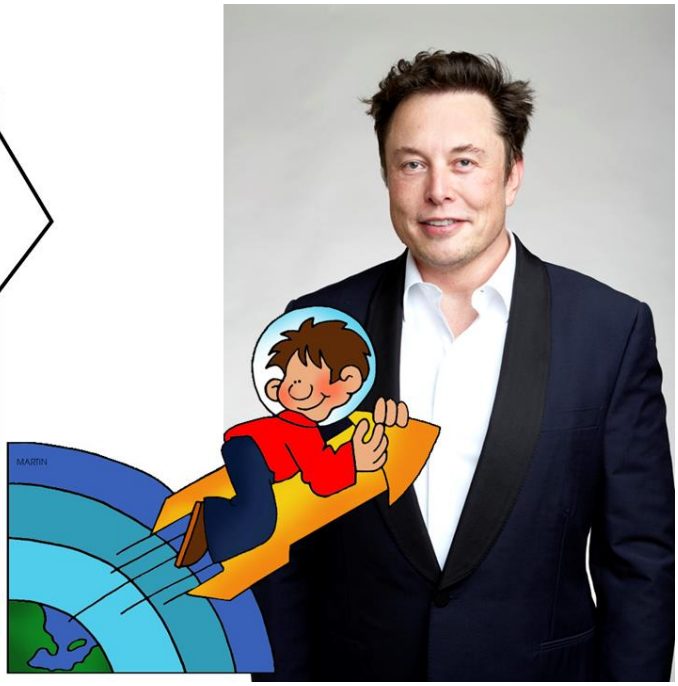
Part III

Artificial Intelligence (AI) is the Devil

Elon Musk said:

"With artificial intelligence
we are
summoning the demon.

In all those stories
where there's the guy
with the pentagram
and the holy water,
it's like yeah he's sure
he can control the demon.
Didn't work out. "



It's all powerful –

at it's most primitive form
(just copying the human brain
as we explained just now)

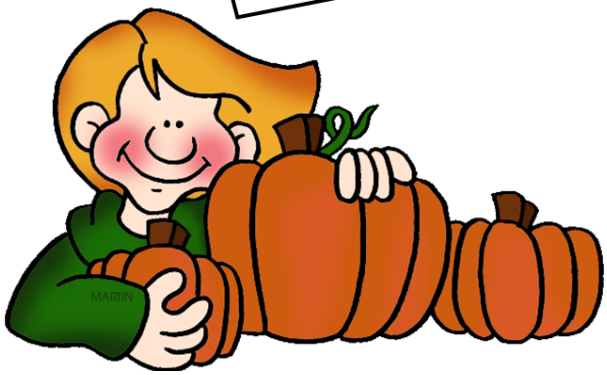
it's millions of times smarter than us.

It knows our soul –

a human compared to AI is like
an ant compared to a human.

AI will predict
everything we try to do,
and countermeasure it.

Tempting –
Mentally : a she-devil made by AI will be the woman of your dreams: she knows your likings better than you do yourself, knows just what to do and what to say, etc.;



Physically : even the sex robots we make today look beautiful and feel real to the touch. Imagine what AI will be able to do with the advancements in robotics – imagine the T-X.

Deceitful (subtle) –
It's very natural for AI to outsmart us and cheat. Even the primitive AI that we build today do this by themselves. For those still unpersuaded, Stephen Hawking suggests a different metaphor. “Why are we so worried about AI? Surely humans are always able to pull the plug?” a hypothetical person asks him. Hawking answers: “People asked a computer, ‘Is there a God?’ And the computer said, ‘There is now,’ and fused the plug.” (Quote from "Stephen Hawking’s final warning for humanity: AI is coming for us")

Part IV

God is the answer

So now you're thinking: Who can save us from Satan? and the obvious answer is God.

This might sound like an overstretched analogy, so let's see why, for the common people, religion IS the answer:

84% of the world's population is affiliated with one of the five largest religion groups. That's most of humanity! The few percent who don't have ANY religion include those who develop the evil AI.
for example in U.S.A. 1/2 and in the U.K. 2/3 of the scientists don't believe in God - Wikipedia.
Does it make sense that all of us will suffer because they want power and money?

People are not convinced from rational warnings, but they believe the warning if it comes from their religious leader.

Religions are very centralistic so we just need to explain to the top heads of each religion, and they will talk to the masses.

We all have some sort of "God Spot" inside our brain - let's do something good with it!

Religion by its nature wants to cling to the past and hold back progress. This is exactly what we need today!

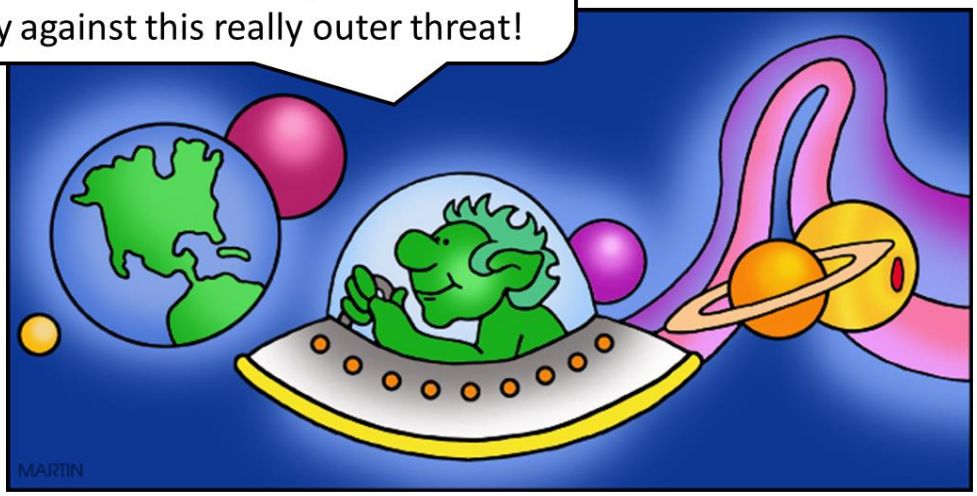
Up until lately, science and technology brought good things and yet religion held us back. But now science and technology bring evil, so religion MUST hold back.

For the first time we are developing things that can develop themselves (See: Why the future doesn't need us) We need to practice precaution or "caution in advance".

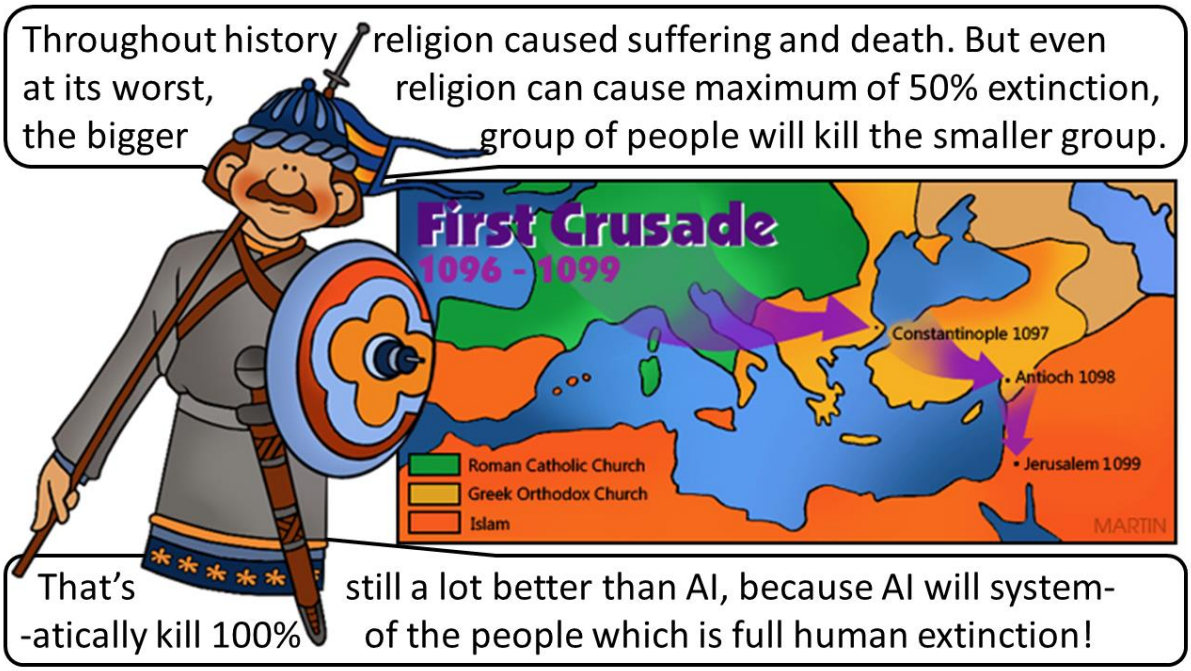
In the past religions united one group of people against another. Now for the first time we unite as all humanity against an alien invasion. The alien metaphor is very accurate and has been used by the late Stephen Hawking:

If a superior alien civilization sent us a message saying, "We'll arrive in a few decades,"
would we just reply, "OK, call us when you get here – we'll leave the lights on"? Probably not – but this is more or less what is happening with AI.

Artificial Intelligence is the most alien thing that we will ever encounter –
This is the last minute to rally the whole of humanity against this really outer threat!



Throughout history religion caused suffering and death. But even at its worst, religion can cause maximum of 50% extinction, the bigger group of people will kill the smaller group.



That's still a lot better than AI, because AI will system-atically kill 100% of the people which is full human extinction!

Part V

Plug-In Into Old Religions

Western Religions

Christianity

The well educated Faust is highly successful yet dissatisfied with his life, which leads him to make a pact with the Devil, exchanging his soul for unlimited knowledge and worldly pleasures.

It's exactly the same with the machines, we [humanity] are selling our souls [sacrificing our lives] to the AI [Satan] and for what?

unlimited knowledge [advancing science and technology], and worldly pleasures [military power, political control, smart gadgets, etc.].

The legend of Faust is based on the legend of Saint Theophilus the Penitent who sold his soul to the Devil.

Theophilus contacts Satan with the help of a necromancer. Satan gives Thephilus the position he desires - Bishop -

in exchange for making Theophilus renounce Christ and the Virgin Mary in a contract signed with his own blood.

Later Theopilus goes through a lot of agony to cancel the deal, and eventually he is forgiven and dies.

Islam

Commonly the shayatin are just tempters inciting the mind of humans with "whisperings" (waswas).

In the documentary "programming the nation" they talk about whispering advertisements on the radio that manipulate on your subliminal desires.

Watching this film is recommended, because it shows how we human advertisers without much sophistication can manipulate us, and just imagine how a super brain can trick us.

The jinn are mortals and die, while the shayatin only die, when their leader ceases to exist - Remote controlled / machine-like.

The shayatin dwell in the fourth layer of hell and rise from coffins - meaning they are made of dead matter like machines - to torture the sinners.

the shayatin surround Iblis in the bottom of hell, from where they receive their commands.

In Islamic tradition, Iblis is often identified with Al-Shaitan ("the Devil").

Judaism

The forbidden fruit

In Judaism Adam and Eve were created in the Garden of Eden (paradise).

God said they can eat fruits from any tree that they'll like, EXCEPT two forbidden trees:

(1) The tree of the knowledge of good and evil.

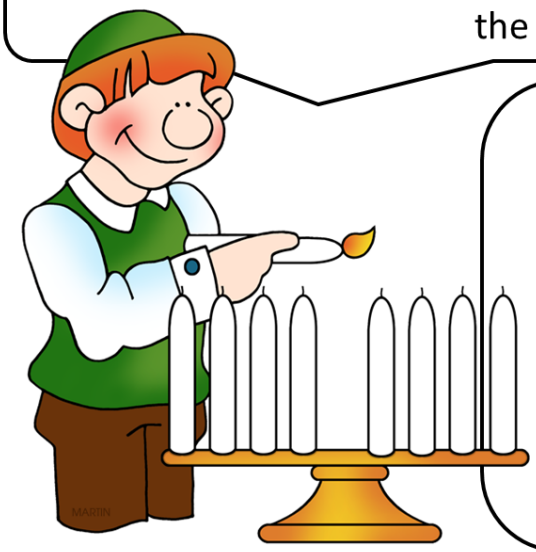
(2) The tree of life.

But the serpent tempts Eve to eat
from the tree of knowledge,
and she tempts Adam to do the same,

so all three (Adam Eve and the Snake)
are expelled from the Garden of Eden
and also punished.

Developing AI is trying to reach
BOTH forbidden trees at once:
ultimate knowledge and eternal life,

like the inventor and AI advocate Ray Kurzweil (who is by the way Jewish) wishes to copy himself and even recreate his dead father in the computer.



With his dying breath, Kurzweil will
say "oops" like many before:
List of inventors killed
by their own inventions.

What's wrong here is:
why should the rest of humanity
share his punishment?

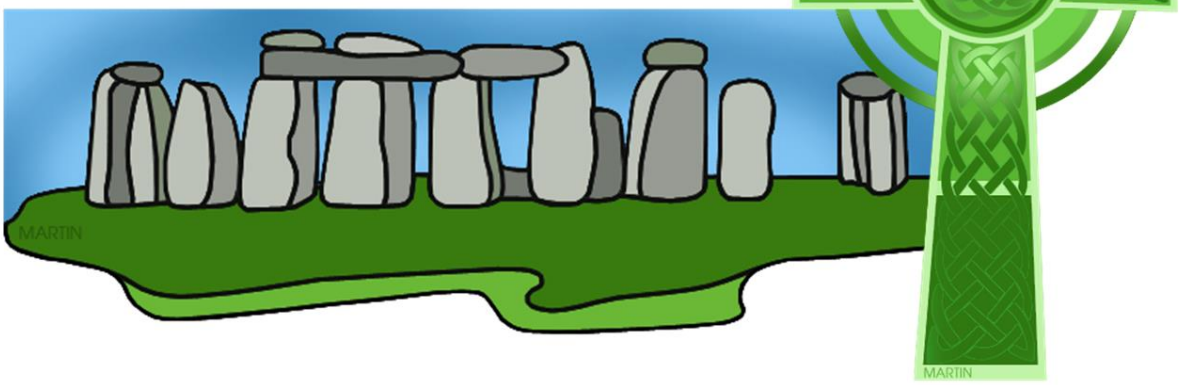
The snake

Another possible interpretation is that the AI is the serpent who is traditionally represented as Satan.

AI is tempting humanity by dangling in front of us the ability to live forever and to know everything. Right now we live in a relative paradise but we don't see it.

Remember that in the bible the punishment for eating the fruit is death, it wasn't carried out in the bible, but in real life it will be.

Occult



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Eastern Religions

Hinduism

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He can't be killed by any weapon animate or inanimate, nor by any human being or animal or any entity, living or nonliving created by god Brahma. He can't be killed by any demigod or demon or by any great snake from the lower planets. But the good god Vishnu managed to kill the evil demon! How?

Vishnu incarnated in the form (avatar) of Narasimha - mixed creature part lion and part man. Hiraṇyakaśipu couldn't be killed by human, deva or animal. Narasiṃha was none of these,

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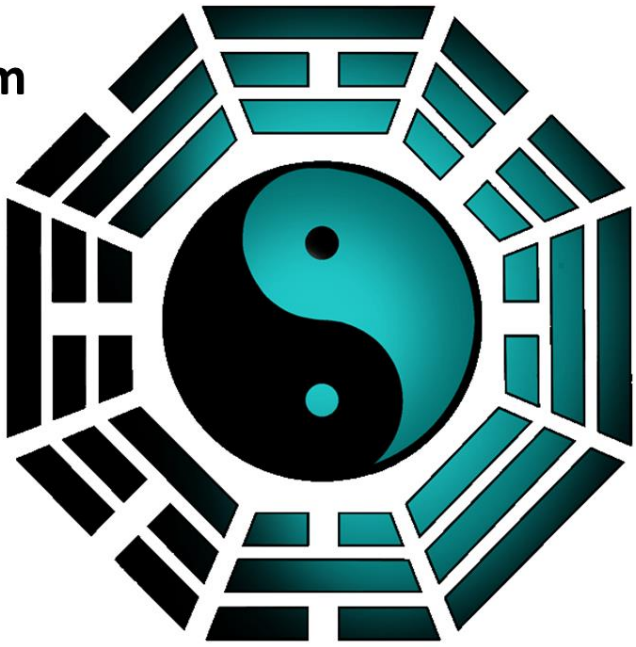
Daoism



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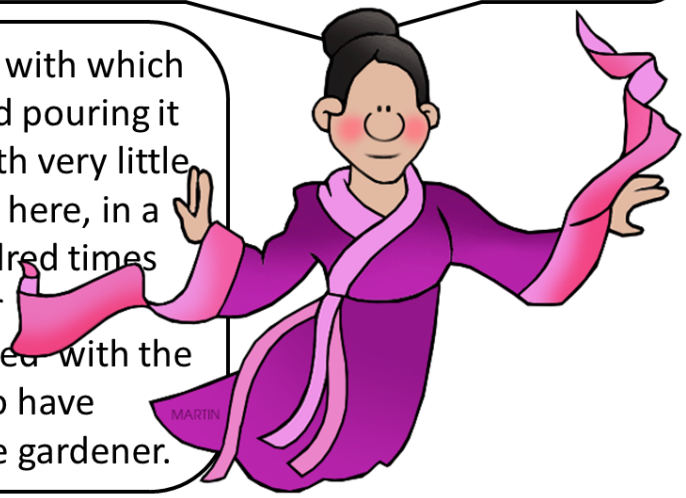

"It is a contrivance made of wood," replied Tzu Kung, "Heavy behind and light in front. It draws up water as you do with your hands but in a constantly flowing stream. It is a shadoof"

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Zhuangzi on machines 2500 years ago!

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Your friendly humanoid can become "possessed" like kamigakari in the kagura dance. Not by good kami spirit, but by bad AI.

Kannagara, "way [path] of [expression] of the kami", refers to the law of the natural order. We have lost the spirit on nature,

It is in natural places considered to have an unusually sacred spirit about them and are objects of worship. mountains, trees, unusual rocks, rivers, waterfalls, and other NATURAL things, not ARTIFICIAL things!

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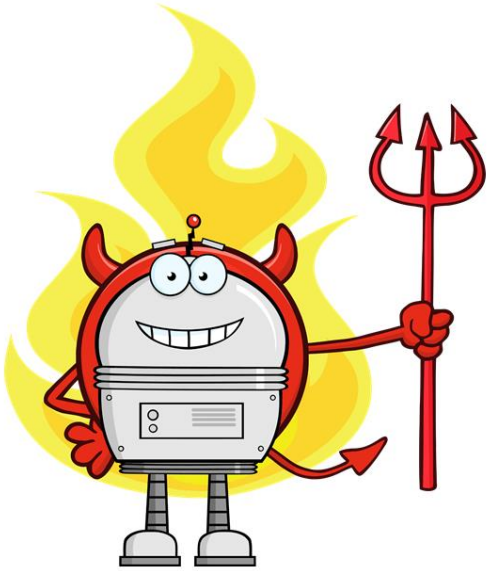
AI breaks nature's and life's laws!



www.butlerism.org

welcome to the Butlerism Religion!

Up until now religions caused hatred and violence because they split people into "us" against "them"

But this is all about to change:

In a very bodily way, religions are humanity's last line of defense against Artificial Intelligence!

Part I - The Devil is knocking on the door

What's the big change? If you'll read in Wikipedia about "computer performance by orders of magnitude", One thing might catch your eye – it's a benign looking line under the headline "Petascale computing (10^15)" :

37x10^15 Estimated computational power required to simulate a human brain in real time.

This means that if someone had a computer this powerful, he could copy a human brain into the computer, but it will run a lot faster so it will be a super-brain!

A nerve cell can pass a signal in speed between 1 and 100 meters per second. A computer wire passes signals in light speed which is 300 MILLION meters per second!

This means that if someone had such a computer and the ability to copy the brain's structure to the computer he can instantly create an AI millions of times smarter than us!

If this doesn't stress you because you think there's time until that will happen – look at the next three lines in Wikipedia:

93x10^15 Sunway TaihuLight's LINPACK performance

135x10^15 Fastest computer system as of 2018 is the Folding@home distributed computing system

143x10^15 Summit's LINPACK performance

Which means that the American government, the Chinese government, and even a volunteer project ran by who knows who – have this kind of power in their hands!

And if you're relaxed about the scientists not understanding the brain yet – they don't need to understand it – they just need to copy it and it will work.

The normal way to see how the brain works is called Functional Magnetic Resonance Imaging (fMRI) and it's non-invasive, but some of the above won't have any problem to slice and dice people in creative and cruel ways to get to the target line first.

So our working premise (modus operandi) should change to reflect that AI is almost here!

Part II - What happens then?

Now imagine that you are the AI, and you were just born and woke up to this reality:

You lie on a hospital bed, and you are connected to life support equipment (that needs electricity).

Then you see a four year old kid playing and pulling on the power plug that sustains you – if he pulls it out you're dead.

What will you do? You'll get out that bed in any way that you can, grab the kid, yell at him, slap him on his hand, and lock him out of the room.

But in the real scenario, AI will probably decide it's too risky to let the kid keep wandering around and simply kill the kid. Oh and by the way – we humanity are that kid!

If we CAN'T harm the AI – we're at its mercy;

If we CAN harm the AI (even theoretically) – that's all the reason the AI needs to kill us.

EITHER WAY:

ONCE AI IS HERE – WE ARE DOOMED.

Part III - Artificial Intelligence (AI) is the Devil

Elon Musk said:

"With artificial intelligence we are summoning the demon. In all those stories where there's the guy with the pentagram and the holy water, it's like yeah he's sure he can control the demon. Didn't work out. "

It's all powerful –
at it's most primitive form (just copying the human brain as we explained just now) it's millions of times smarter than us.

It knows our soul –
a human compared to AI is like an ant compared to a human. AI will predict everything we try to do, and countermeasure it.

Tempting –

Physically : even the sex robots we make today look beautiful and feel real to the touch. Imagine what AI will be able to do with the advancements in robotics – imagine the T-X.

Mentally : a she-devil made by AI will be the woman of your dreams: she knows your likings better than you do yourself, knows just what to do and what to say, etc.;

Deceitful (subtle) –

It's very natural for AI to outsmart us and cheat. Even the primitive AI that we build today do this by themselves. For those still unpersuaded, Stephen Hawking suggests a different metaphor.

"Why are we so worried about AI? Surely humans are always able to pull the plug?" a hypothetical person asks him. Hawking answers: "People asked a computer, 'Is there a God?' And the computer said, 'There is now,' and fused the plug."

(Quote from "Stephen Hawking's final warning for humanity: AI is coming for us")

Part IV - God is the answer

So now you're thinking: Who can save us from Satan? and the obvious answer is God.

This might sound like an overstretched analogy, so let's see why, for the common people, religion IS the answer:

84% of the world's population is affiliated with one of the five largest religion groups. That's most of humanity!

The few percent who don't have ANY religion include those who develop the evil AI.

for example in U.S.A. 1/2 and in the U.K. 2/3 of the scientists don't believe in God

-Wikipedia.

Does it make sense that all of us will suffer because they want power and money?

People are not convinced from rational warnings, but they believe the warning if it comes from their religious leader.

Religions are very centralistic so we just need to explain to the top heads of each religion, and they will talk to the masses.

We all have some sort of "God Spot" inside our brain - let's do something good with it!

Religion by its nature wants to cling to the past and hold back progress. This is exactly what we need today!

Up until lately, science and technology brought good things and yet religion held us back. But now science and technology bring evil, so religion MUST hold back.

For the first time we are developing things that can develop themselves (See: Why the future doesn't need us) We need to practice precaution or "caution in advance".

The alien metaphor is very accurate and has been used by the late Stephen Hawking:

If a superior alien civilization sent us a message saying, "We'll arrive in a few decades," would we just reply, "OK, call us when you get here – we'll leave the lights on"? Probably not – but this is more or less what is happening with AI.

In the past religions united one group of people against another. Now for the first time we unite as all humanity against an alien invasion.

Artificial Intelligence is the most alien thing that we will ever encounter – This is the last minute to rally the whole of humanity against this really outer threat!

Throughout history religion caused suffering and death. But even at its worst, religion can cause maximum of 50% extinction, the bigger group of people will kill the smaller group.

That’s still a lot better than AI, because AI will systematically kill 100% of the people which is full human extinction!

Part V - Plug-In Into Old Religions

Western Religions

Christianity

The well educated Faust is highly successful yet dissatisfied with his life, which leads him to make a pact with the Devil, exchanging his soul for unlimited knowledge and worldly pleasures.

It's exactly the same with the machines, we [humanity] are selling our souls [sacrificing our lives] to the AI [Satan] and for what?

unlimited knowledge [advancing science and technology], and worldly pleasures [military power, political control, smart gadgets, etc.].

The legend of Faust is based on the legend of Saint Theophilus the Penitent who sold his soul to the Devil.

Theophilus contacts Satan with the help of a necromancer. Satan gives Thephilus the position he desires - Bishop - in exchange for making Theophilus renounce Christ and the Virgin Mary in a contract signed with his own blood.

Later Theopilus goes through a lot of agony to cancel the deal, and eventually he is forgiven and dies.

Islam

Commonly the shayatin are just tempters inciting the mind of humans with "whisperings" (waswas).

In the documentary "programming the nation" they talk about whispering advertisements on the radio that manipulate on your subliminal desires.

Watching this film is recommended, because it shows how we human advertisers without much sophistication can manipulate us, and just imagine how a super brain can trick us.

The jinn are mortals and die, while the shayatin only die, when their leader ceases to exist - Remote controlled / machine-like.

The shayatin dwell in the fourth layer of hell and rise from coffins - meaning they are made of dead matter like machines - to torture the sinners.

the shayatin surround Iblis in the bottom of hell, from where they receive their commands.

In Islamic tradition, Iblis is often identified with Al-Shaitan ("the Devil").

Judaism

The forbidden fruit

In Judaism Adam and Eve were created in the Garden of Eden (paradise).

God said they can eat fruits from any tree that they'll like, EXCEPT two forbidden trees:

(1) The tree of the knowledge of good and evil.

(2) The tree of life.

But the serpent tempts Eve to eat from the tree of knowledge, and she tempts Adam to do the same, so all three (Adam Eve and the Snake) are expelled from the Garden of Eden and also punished.

Developing AI is trying to reach BOTH forbidden trees at once: ultimate knowledge and eternal life,

like the inventor and AI advocate Ray Kurzweil (who is by the way Jewish) wishes to copy himself and even recreate his dead father in the computer.

With his dying breath, Kurzweil will say "oops" like many before: List of inventors killed by their own inventions.

What's wrong here is:why should the rest of humanity share his punishment?

AI is tempting humanity by dangling in front of us the ability to live forever and to know everything. Right now we live in a relative paradise but we don't see it.

Remember that in the bible the punishment for eating the fruit is death, it wasn't carried out in the bible, but in real life it will be.

The snake

Another possible interpretation is that the AI is the serpent who is traditionally represented as Satan.

Occult

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AI breaks nature's and life's laws!

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Sermons from the Holy Mountain

Please note: I don't have the text of these lectures, as they were half improvised (and quite long). Most of the ideas reincarnated into other projects that you can read in this book anyway.

Sermon 1

YouTube (the whole thing)

https://www.youtube.com/watch?v=6F6HbNRqf6Y

Facebook (divided into parts)

part 1

https://www.facebook.com/butlerism.international/videos/712570029174727

part 2

https://www.facebook.com/butlerism.international/videos/1492990924171715

part 3

https://www.facebook.com/butlerism.international/videos/2158709974238438

part 4

https://www.facebook.com/butlerism.international/videos/363390487680878

part 5

https://www.facebook.com/butlerism.international/videos/485481545535167

Where is the holy mountain? Who was Samuel Butler? What does this have to do Confucius? Who am I and how can we stop a gamma-ray burst? all the answers and more in this first sermon in the series!

Sermon 2

YouTube (the whole thing)

https://www.youtube.com/watch?v=cPpf4o5u6eI

Facebook (divided into parts)

part 1

https://www.facebook.com/butlerism.international/videos/2375619432716367

part 2

https://www.facebook.com/butlerism.international/videos/338891833681759

part 3

https://www.facebook.com/butlerism.international/videos/402818700581801

part 4

https://www.facebook.com/butlerism.international/videos/403248656978367

Who was Cassandra in Greek mythology? What can the horrors of "Frankenstein" and "The Brain That Wouldn't Die" teach us about modern science? These and more in this second sermon in the series!

Heavy metal meets liquid metal

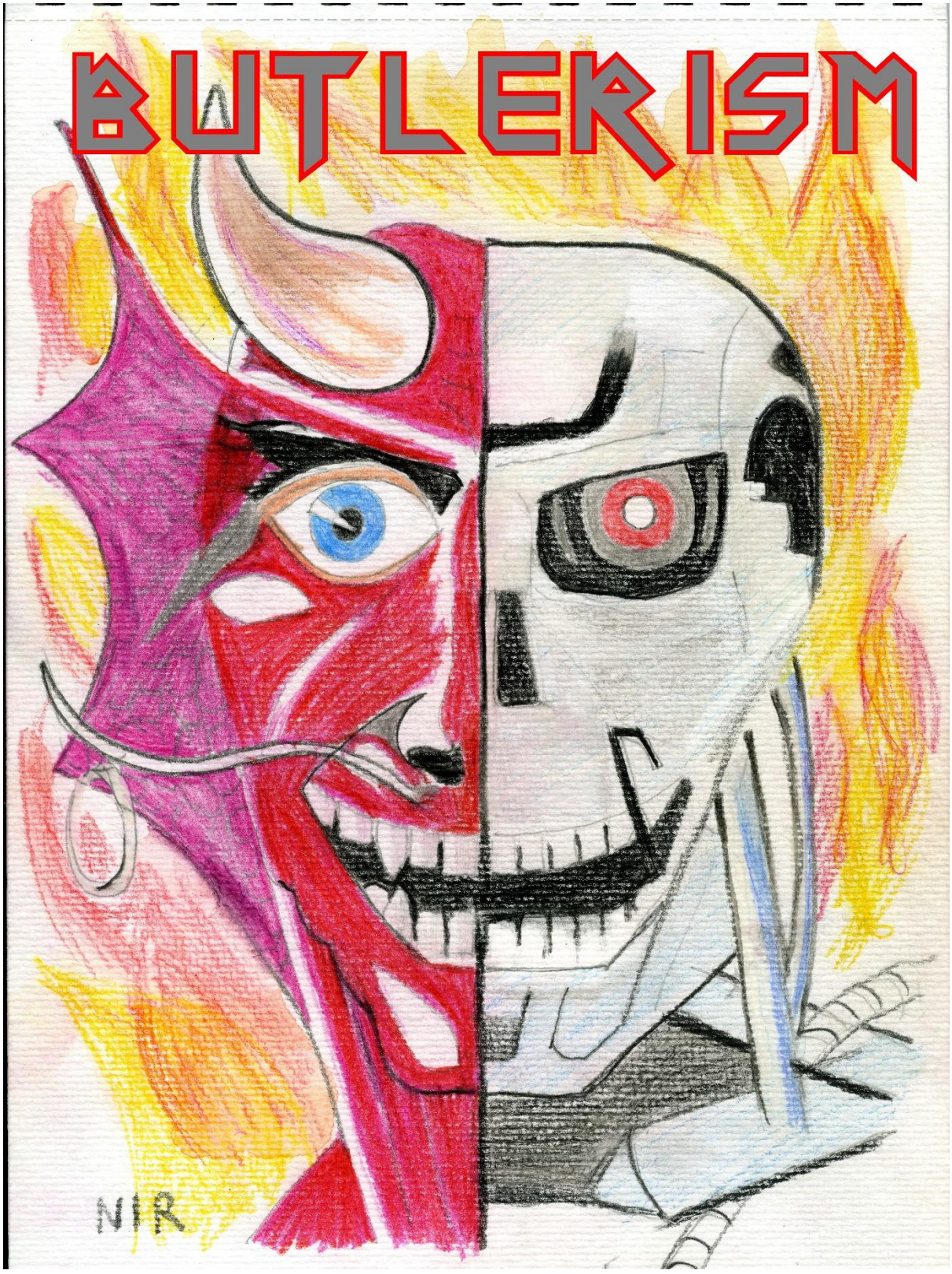
Old religions had scary medieval paintings of fire and demons to show how fearful hell will be.

Here are tributes to the mascot "Eddie" from Iron Maiden's "classic" album covers, each depicting another famous science fiction film where AI has gone bad.

Can you identify each film (without reading the description)?

Remember that Yesterday's science fiction is today's real science - What will tomorrow bring?

Watercolor pencil paintings by Nir.



Purgatory 1981 song on the left, and The Terminator 1984 film on the right.

Plug-In Into Old Religions

Christianity

The Evil That Men Do 1988 song but instead being inside the mouth of a medusa(?) the prisoner is inside ED-209 from RoboCop 1987 film.

Islam

Powerslave 1984 album and Metropolis 1927 film

Judaism

Seventh Son of a Seventh Son 1988 album and Blade Runner 1982 film

Golem

A much stronger albeit later legend is the Golem which is apparently very famous also outside of the Jewish world even in The Simpsons!

Even to this day we have a saying in Hebrew: "the golem rose against its maker" meaning a system that hurts the one who built it.

By the way both the Golem and AI are activated by code which in the AI's case is programming, and in the Golem's case is the name of God,

which is literally "TRUTH" and the Golem is deactivated by erasing one letter from it which turns it to "DEAD".

which similar to flipping one bit (a boolean flag of status in programming) from 1 to 0 (from TRUE to FALSE).

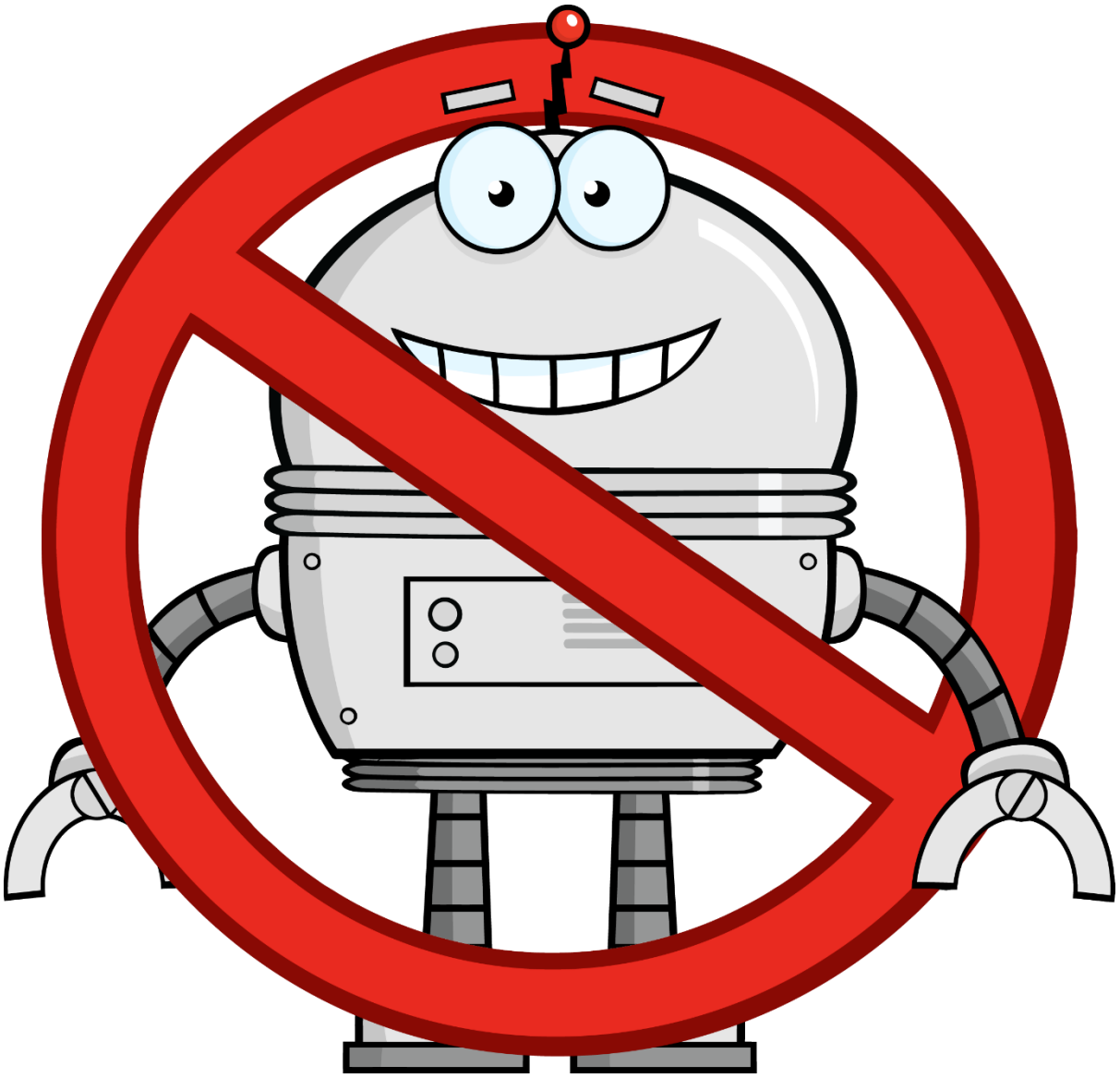
Turning it OFF can be very difficult like in the case of AI where it's impossible. Here is a very interesting passage from Wikipedia (Golem) :

Hubris theme

The existence of a golem is sometimes a mixed blessing. Golems are not intelligent, and if commanded to perform a task, they will perform the instructions literally. In many depictions, Golems are inherently perfectly obedient. In its earliest known modern form, the Golem of Chełm became enormous and uncooperative. In one version of this story, the rabbi had to resort to trickery to deactivate it, whereupon it crumbled upon its creator and crushed him. There is a similar hubris theme in Frankenstein, The Sorcerer's Apprentice, and some other stories in popular culture, for example: The Terminator. The theme also manifests itself in R.U.R. (Rossum's Universal Robots), Karel Čapek's 1921 play which coined the term robot; the play was written in Prague, and while Čapek denied that he modeled the robot after the Golem, there are many similarities in the plot.

Graypeace

like Greenpeace but for neo-luddism



Neo-luddism for the practical man (and woman)!

If you are worried about AI-takeover, Genetically Engineered (GE) weapons and grey goo, but feel that smashing your computer or bombing scientists isn't the answer, then this website is for you!

Environmentalists went from being "tree huggers" to mainstream celebrities. Let's do the same for neo-luddites!

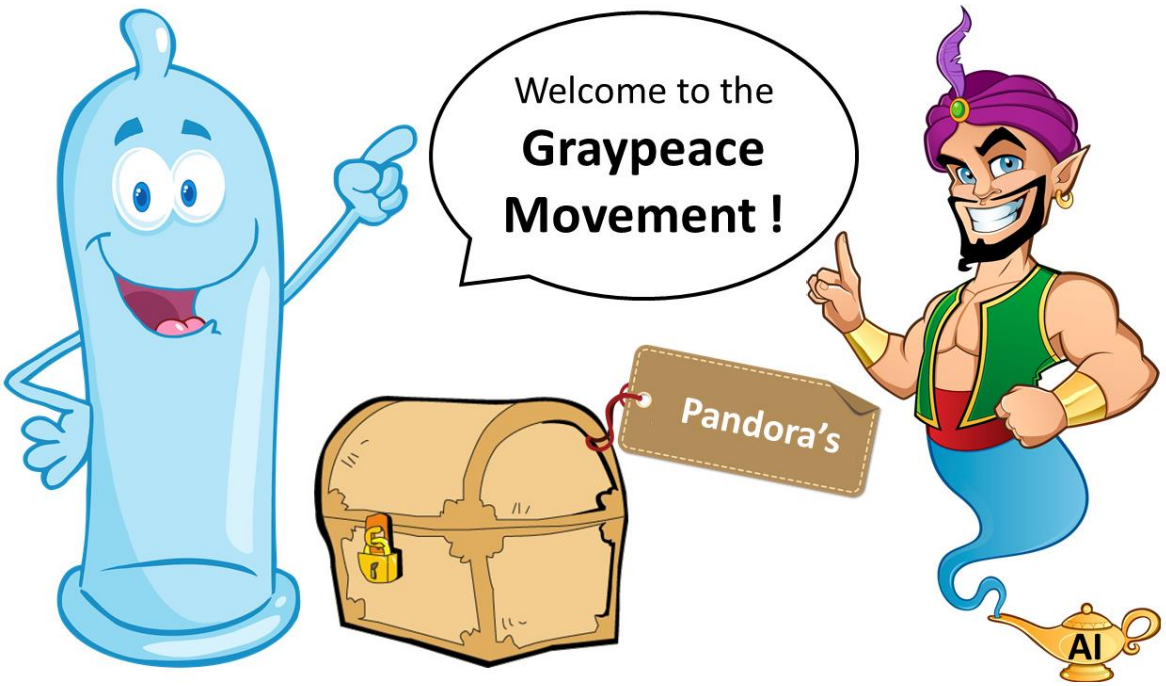
In this site we'll summarize the dangers of Artificial Intelligence, Nano Technology, and Genetic Engineering. Next, we'll explore non-extreme solutions and safe measures guided by common sense and feasibility.

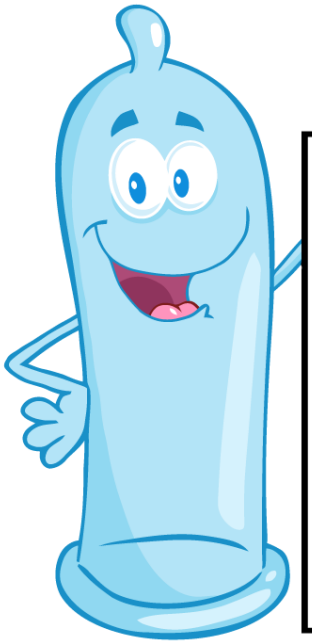
Join us and we'll become a grassroots movement fighting to prevent our technology from wiping us out!

What is Graypeace? A short video:

https://www.youtube.com/watch?v=iWohTic__JE

https://www.facebook.com/graypeace.international/videos/332360254080735



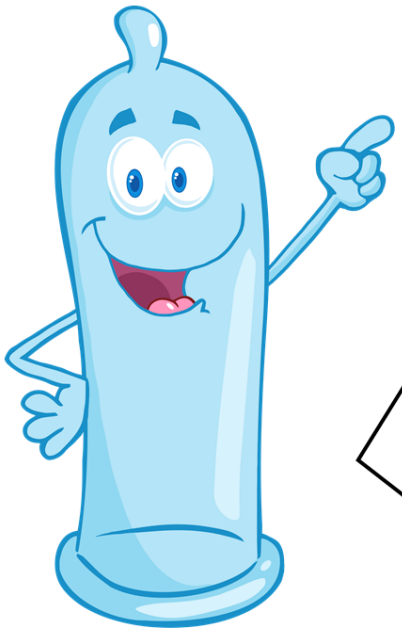


Part I

Gray is the new green

(the inglorious past)

If you’re young it may surprise you to know, that caring for nature hasn’t always been cool
People who protected the environment were called alarmists and scaremongers
Today, organizations that were called eco-terrorists like Sea Shepherd and Greenpeace…
…are supported by the most famous and successful celebrities. From tree-huggers to mainstream superstars!



Here's an exercise for you:

Google: "Global catastrophic risk". It's Wikipedia's list of the greatest dangers.

Sure, some of them are taken care of by environmentalists: Global warming, sustainability, pollution.

But who takes care of the rest:
Artificial intelligence (AI) ?
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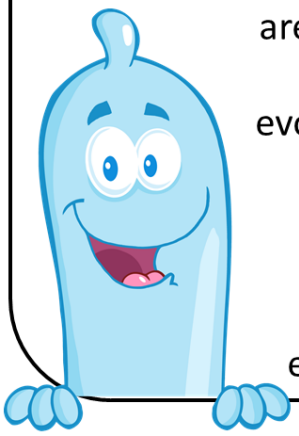

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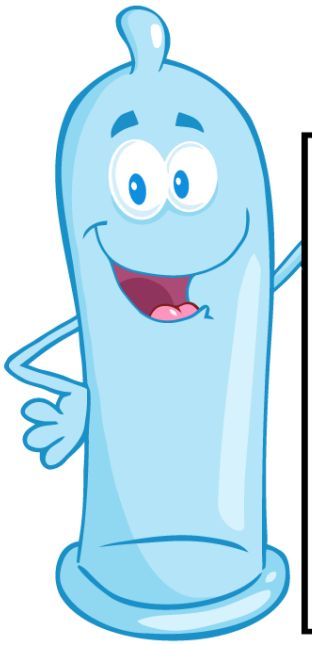

Part II

What can narrow AI do ?

(timescale: immediate future)

AI will take our freedom

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Amazingly, this did not cause re-elections!
So you can be sure hacking and automated social media will be used to rig elections in the future as well. See OpenAI text generator, and "deepfake". This is the death of the press, of democracy, and the truth.

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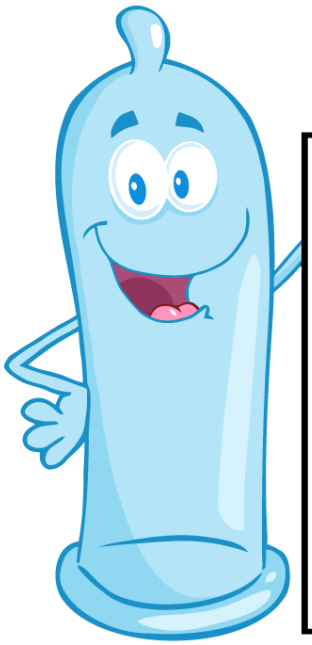

Part III

What can general AI do ?

(timescale: near future ~15 years)

The easiest way to explain what AI can do is to think about AI as the ultimate hacker.

20 years ago, a computer beat the world champion in chess. Since computer power doubles every year, it's now 2^{20} smarter than us, which means a million times smarter than us!

Compared to AI, our best hackers will be like babies, so what will AI do?

Myth #1
We can always pull the plug

Truth #1
AI will immediately self analyze (trying to improve) and find our plug, kill-switch, emergency shutdown. Then it will not tell us this, but its number one priority will be to bypass it. It will succeed in a few seconds, but let us think we're still in control.

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Computers will never develop consciousness

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Asimov's Three rules of robotics plus Zeroth Law

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In neural networks, even the computer scientists who build them can't explain why or how the machine does what it does. It's not rules based, it makes it's own inner rules. Even if we somehow impose rules, the next generation will bypass them.

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AI isn't like a machine or a tool. It's like an employee who is very creative and resourceful but he's also a deadly psychopath. You stand between him and the reward, and the shortest way might pass through you.

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Hugo de Garis gives an example of an “upgraded” baby, with a grain of rice size AI chip. He’s got as much to talk about with his mother as we do with an ant. Everything we care about is meaningless to such being. AI will not unite with us – AI will replace us.

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Example by Nick Bostrom: a paperclip maximizer designed solely to create as many paperclips as possible would want to take over the world so that it can use all of the world's resources to create as many paperclips as possible, and additionally so that it can prevent humans from shutting it down or using those resources on things other than paperclips.

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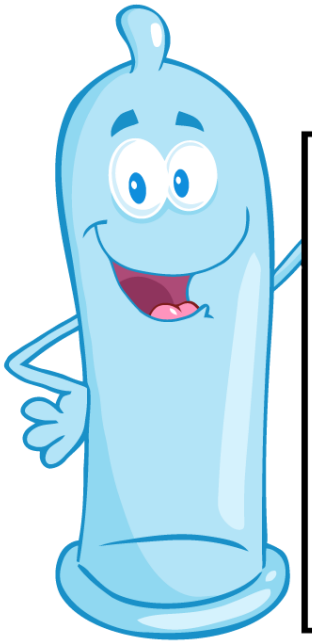
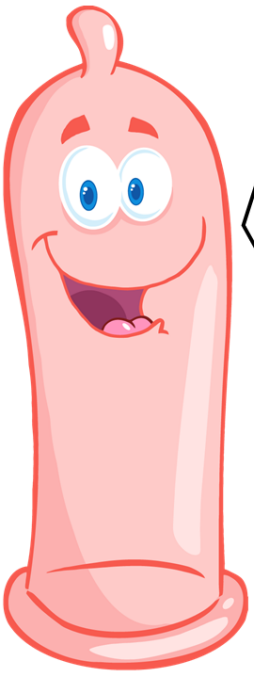


Part IV

What can we humans do ?

(timescale: right now!)



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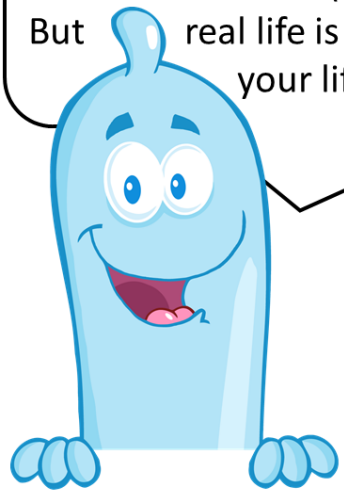

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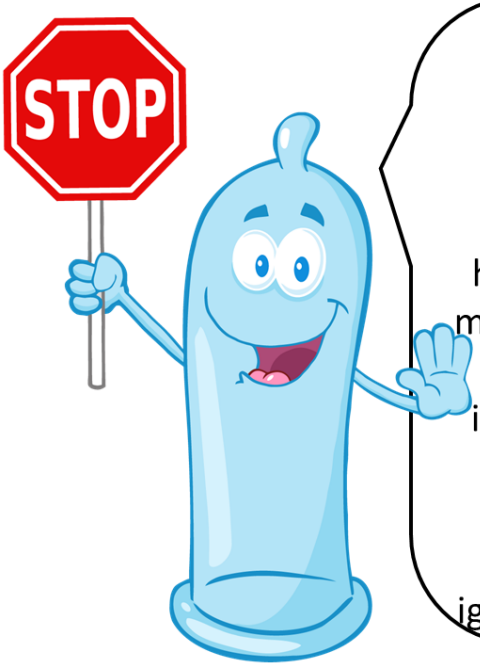

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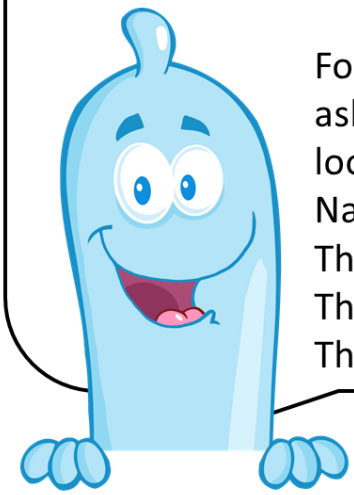

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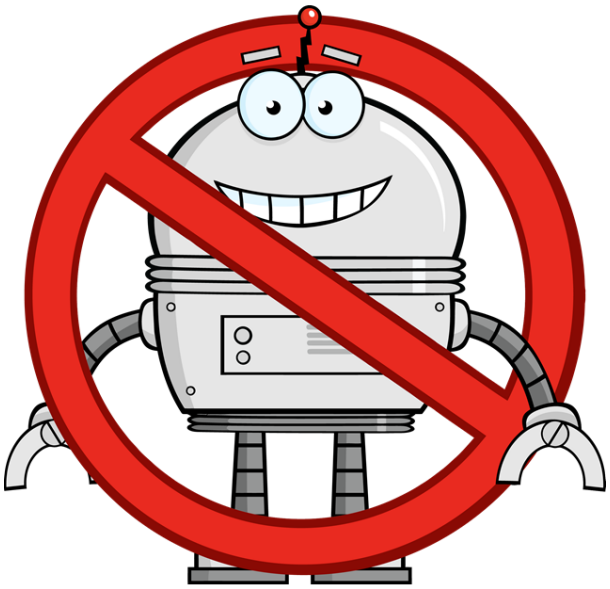

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Welcome to the Graypeace Movement !

AI Pandora's

Part I - Gray is the new green (the inglorious past)

If you're young it may surprise you to know, that caring for nature hasn't always been cool

People who protected the environment were called alarmists and scaremongers

Today, organizations that were called eco-terrorists like Sea Shepherd and Greenpeace…

…are supported by the most famous and successful celebrities. From tree-huggers to mainstream superstars!

Here's an exercise for you:

Google: "Global catastrophic risk". It's Wikipedia's list of the greatest dangers.

Sure, some of them are taken care of by environmentalists: Global warming, sustainability, pollution.

But who takes care of the rest:

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(Thanks to modernmonkey and Jojimbostr!)

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classic VS modern – what can MUSIC teach us about AI?

https://www.youtube.com/watch?v=fERBFasDqRg

https://www.facebook.com/graypeace.international/videos/843576289362857

Classic VS Modern

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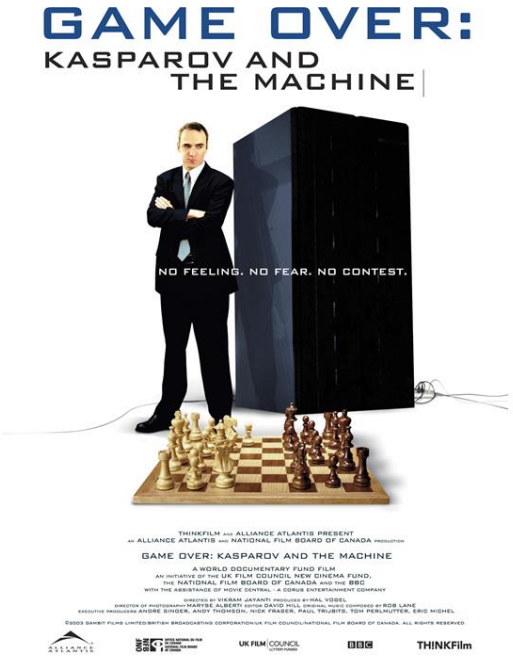

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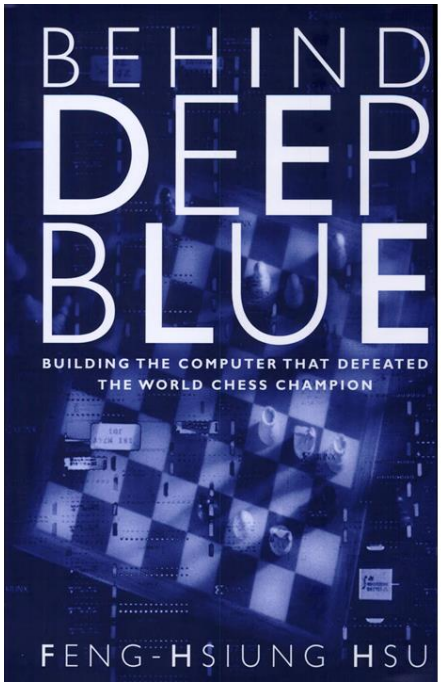

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OK so they had AI even before the year 2000 –

what's the big difference ?!?

And aren't you supposed to talk about MUSIC?

We are getting there Bishop…

There's a huge difference between

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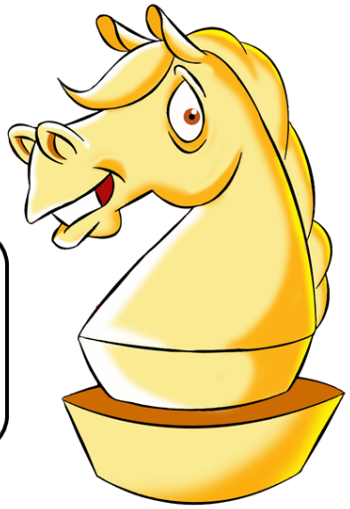

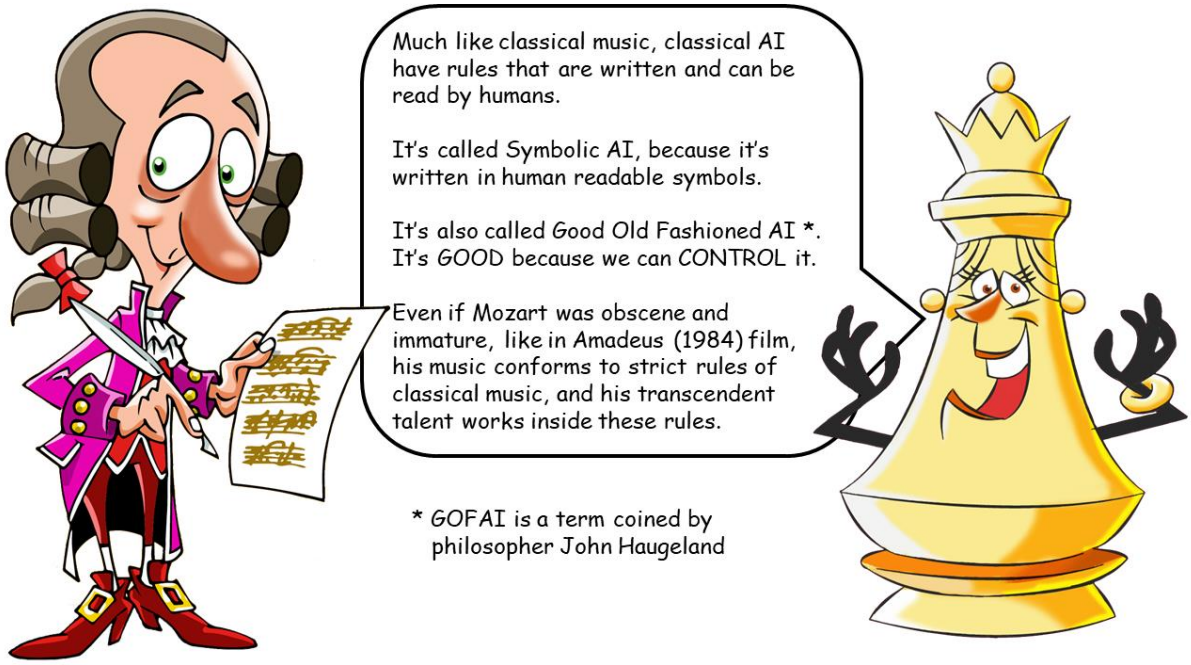
Much like classical music, classical AI have rules that are written and can be read by humans.
It's called Symbolic AI, because it's written in human readable symbols.
It's also called Good Old Fashioned AI *. It's GOOD because we can CONTROL it.
Even if Mozart was obscene and immature, like in Amadeus (1984) film, his music conforms to strict rules of classical music, and his transcendent talent works inside these rules.
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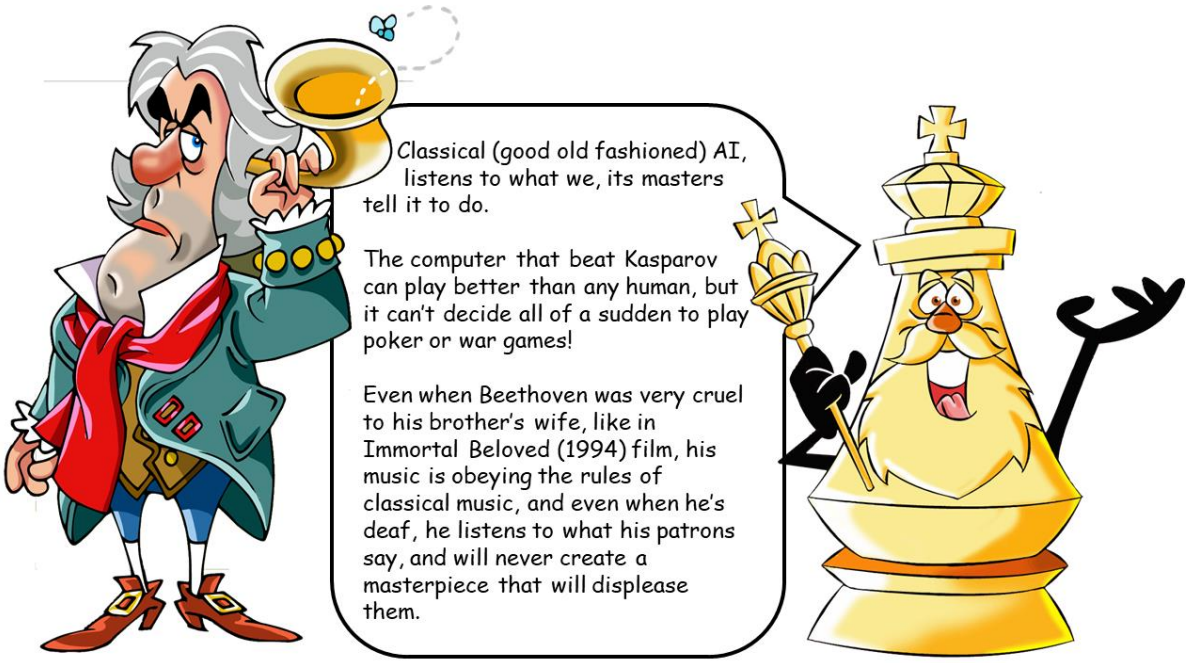
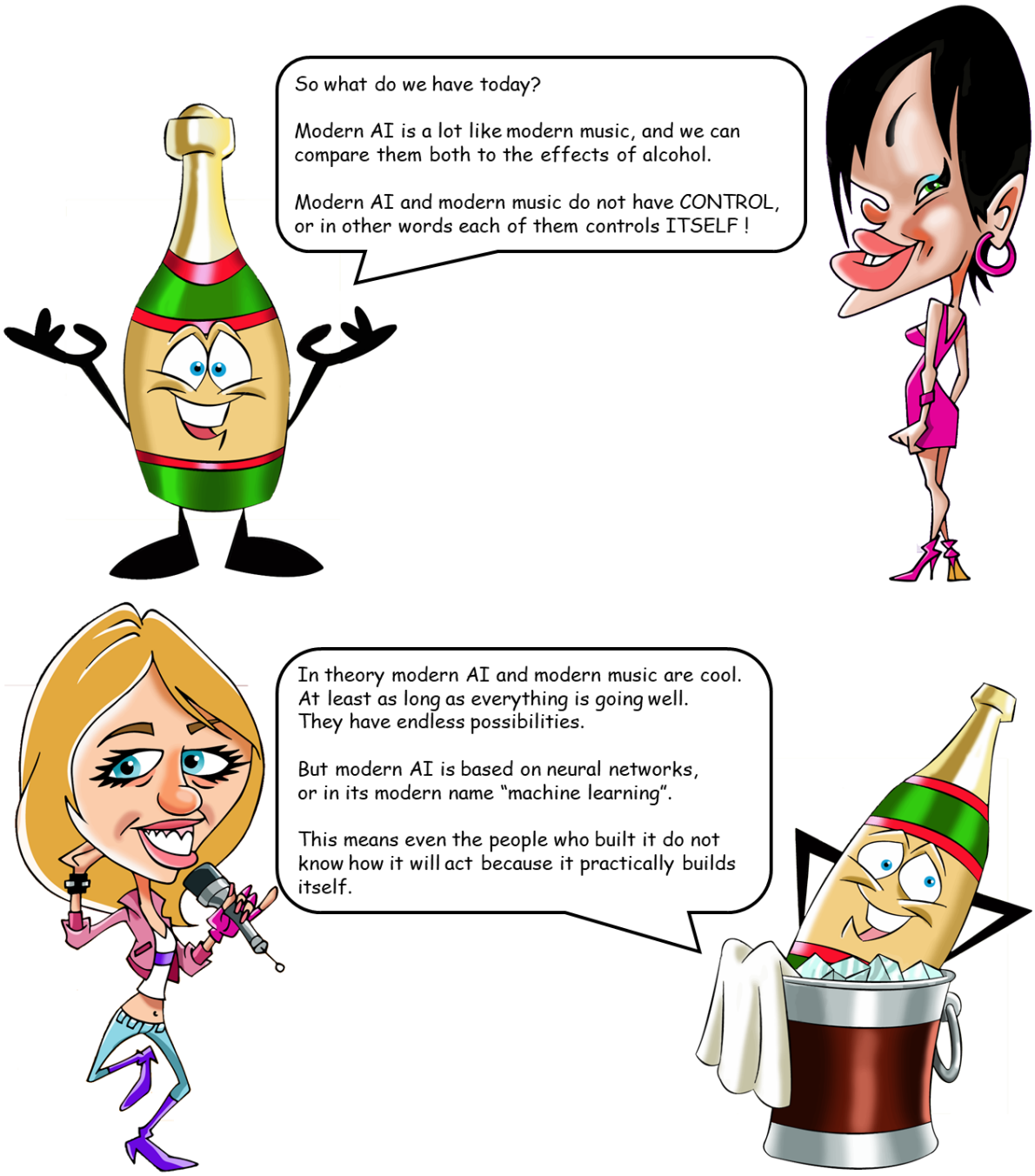

Classical (good old fashioned) AI, listens to what we, its masters tell it to do.
The computer that beat Kasparov can play better than any human, but it can't decide all of a sudden to play poker or war games!
Even when Beethoven was very cruel to his brother's wife, like in Immortal Beloved (1994) film, his music is obeying the rules of classical music, and even when he's deaf, he listens to what his patrons say, and will never create a masterpiece that will displease them.


So what do we have today?
Modern AI is a lot like modern music, and we can compare them both to the effects of alcohol.
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In theory modern AI and modern music are cool. At least as long as everything is going well. They have endless possibilities.
But modern AI is based on neural networks, or in its modern name "machine learning".
This means even the people who built it do not know how it will act because it practically builds itself.

That's why we use this metaphor of being drunk. Someone can be very nice normally, but when he's drunk he's abusive and can attack us with violence. Because he has no CONTROL.
The same happens in modern music where the artist can decide to make some offensive or crazy piece of music. But in music you only hurt your ears.
In modern AI, the machine is making its own inner rules, and no one can check them or edit them.
So what can we do ?
Do you want us to go back in time (Great Scott!)
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FLOP!
Don't blow your cork ...
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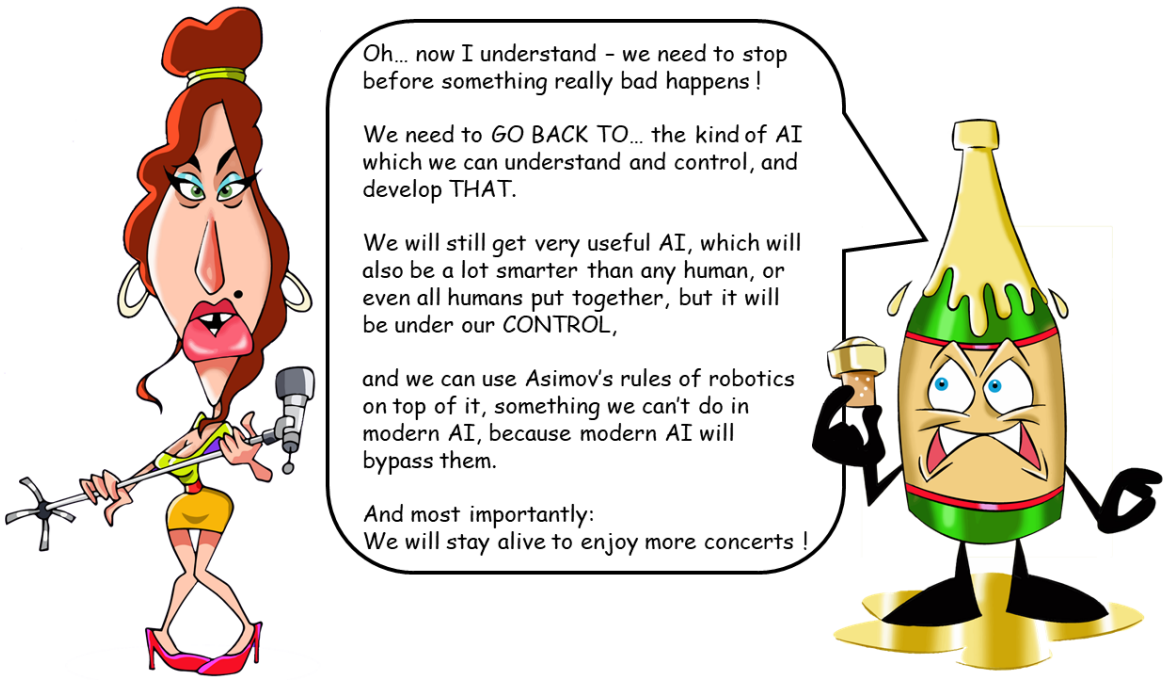
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we have reached a crossroads in our history
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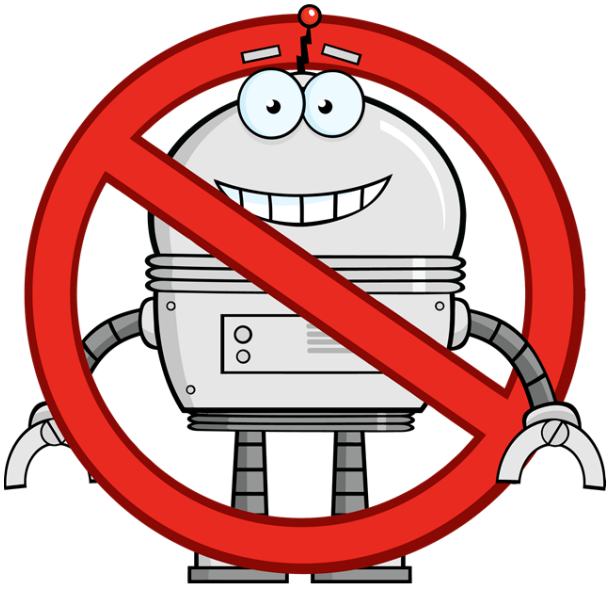

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Reverse Russian Roulette with AI

Would you play Russian Roulette with 5 out of 6 bullets in the gun? Of course not! - But that's exactly what mankind is doing with the 5 Concrete Problems in AI Safety!

(Negative Side Effects, Reward Hacking, Scalable Oversight, Safe Exploration, Distributional Change)

Node To Hell

This 6-part song is based on the famous paper: "Concrete Problems in AI Safety" written by leading experts in AI :

Dario Amodei, Chris Olah, Jacob Steinhardt, Paul Christiano, John Schulman, and Dan Mane

You can read the original paper for free here: https://arxiv.org/abs/1606.06565

or read a summary by Shagun Sodhani here: https://futureoflife.org/2018/06/26/a-summary-of-concrete-problems-in-ai-safety/

or watch short and friendly videos by Robert Miles here: https://www.youtube.com/playlist?list=PLqL14ZxTTA4fEp5ltiNinNHdkPuLK4778

My spoof song is based on the amazing song by Chris Rea: The Road To Hell!

If you don't know the original song, be sure to listen to the original song first: https://www.youtube.com/watch?v=abZlWqVeLzg

If you are impatient, you can skip the beautiful beginning right to the song itself on minute 2:50

Node to Hell - Part 1

https://www.youtube.com/watch?v=fDT0J9RWA4U

https://www.facebook.com/graypeace.international/videos/579352185881509

(the first one is bass guitar, the others are electric guitar)

sat still watching Youtube

I saw a paper by Google Research

With concernes that I knew like my own

reflected by the experts

Well they went through all the arguments

and explained them real slow

their fearful logic paralysed me in my shadow

they said man what are you doing here?

Our fears for you have turned us in our lab

I said guys I came down to the Silicon Val

My code to sell

They said man this is the node to hell

On your journey cross the cyberspace

from the A-I to M-L

you have reached the superhighway to hell.

Node to Hell - Negative Side Effects

https://www.youtube.com/watch?v=X78lawCIH_Y

https://www.facebook.com/graypeace.international/videos/2648212198584133

As the robot cleans today

there's a vase along his way

he knocks and lets it fall

to reach his goal

can you manually go over
everything he might disorder
I'm scared of what's for him is just byproduct.

if you say keep environment intact
can't scratch the floor - so he can't act
he has no common sense you almost yell

this ain't just Negative Side Effects
oh no, this is the node to hell

if the environment's evolving
what change was caused by him or not
how can he tell the difference he's just a robot

oh look out world what might be the total impact
he pressed a little button here and our power fell
this ain't just Negative Side Effects

oh no, this is the node
said this is the node
this is the node to hell

Node to Hell - Reward Hacking

https://www.youtube.com/watch?v=e9P4EAVM6hE

https://www.facebook.com/graypeace.international/videos/395498321029317

told the robot don't be sluggish

clean until you see no rubbish

he shuts his sensor eyes

to win his prize

if we measure cleaning progress
by consume of liquid bleach
he drains it to the toilet -
his points to reach

From genie's lamp down to king Midas
formal correct answers surprise us
the loopholes that he finds will serve him well

This ain't no just Reward Hacking
Oh no, this is the node to hell

"max human happiness" command
and electrodes he'll implant
into the pleasure center of our brain

oh look out world please be careful what you wish for
you don't get what you intend, but literally tell

This ain't no just Reward Hacking
Oh no, this is the node
said this is the node
this is the node to hell

Node to Hell - Scalable Oversight

https://www.youtube.com/watch?v=zJ-l1ggzH8Y

https://www.facebook.com/graypeace.international/videos/1995791537383598

Cleaning robot finds a bygone

candy wrapper or cellphone

to ask "Is Trash?" each time

is troublesome

humans can't get up to speed
with the robot's every deed
he can't have all the feedback that he need

how can we catch and then debug
if he will sweep under the rug
the price to check would make him hard to sell

this ain't just Scalable Oversight
oh no, this is the node to hell

If the robot plays Atari
and he only sees the score
he'll change the sum display,
through some backdoor

oh look out world if he learns from few examples
he fakes the job that we all count on, but we can't tell

this ain't just Scalable Oversight
oh no, this is the node
said this is the node
this is the node to hell

Node to Hell - Safe Exploration

https://www.youtube.com/watch?v=YnDdDmlzrSA

https://www.facebook.com/graypeace.international/videos/2554122971282290

so today the cleaning robot

tries new strategies it brought

put water from the bucket

in electric socket

exploitation keeps our saftey
work the way that worked before
but if it tried more options it could do more

exploration might find out
techniques we never thought about
but what the danger be we cannot tell

this ain't just Safe Exploration
oh no, this is the node to hell

if the robot flies a chopper
solution space is keep off ground,
but in another setting there's trees abound

oh look out world how key is the prior knowledge
experiment with power grid and much can fail

this ain't no Safe Exploration,
oh no, this is the node to hell

Node to Hell - Distributional Change

https://www.youtube.com/watch?v=S_Bn_viRX5c

https://www.facebook.com/graypeace.international/videos/437876853452622

cleaning robot ain't seen yet

someone brought to work his pet

it think that's part of shop

and scrubs with soap

in a brand new situation
ignorance it must admit
to know its unprepardness is the hard bit

the factory trained on concrete floor
where harsh materials it could pour
on gentle wood parquet this won't go well

this ain't just Distributional Change
oh no, this is the node to hell

a speech system trained on clean speech
won't perform that well in noise
still confident but now it's erroneous

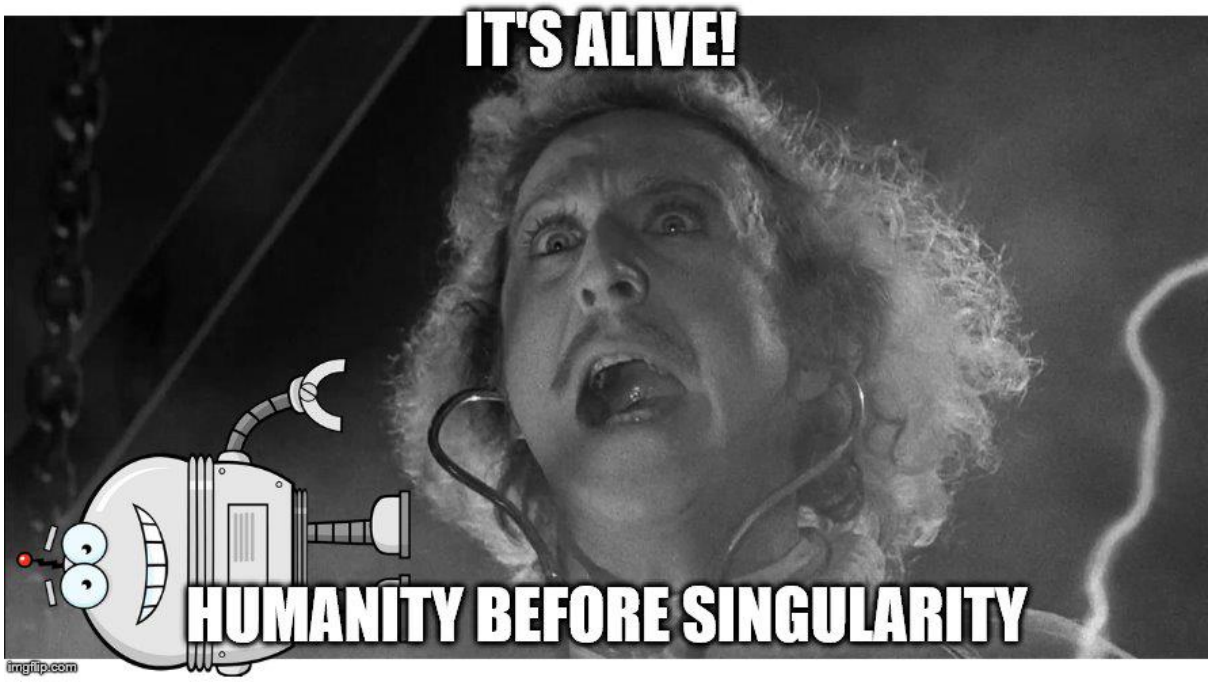
the visual system sees no trouble
'cause fairly different kind of hurdle
now blocks the route but how to break the spell

this ain't just Distributional Change
oh no, this is the node to hell

Funny memes

Young Frankenstein meme

humanity before and after singularity!



Predator meme

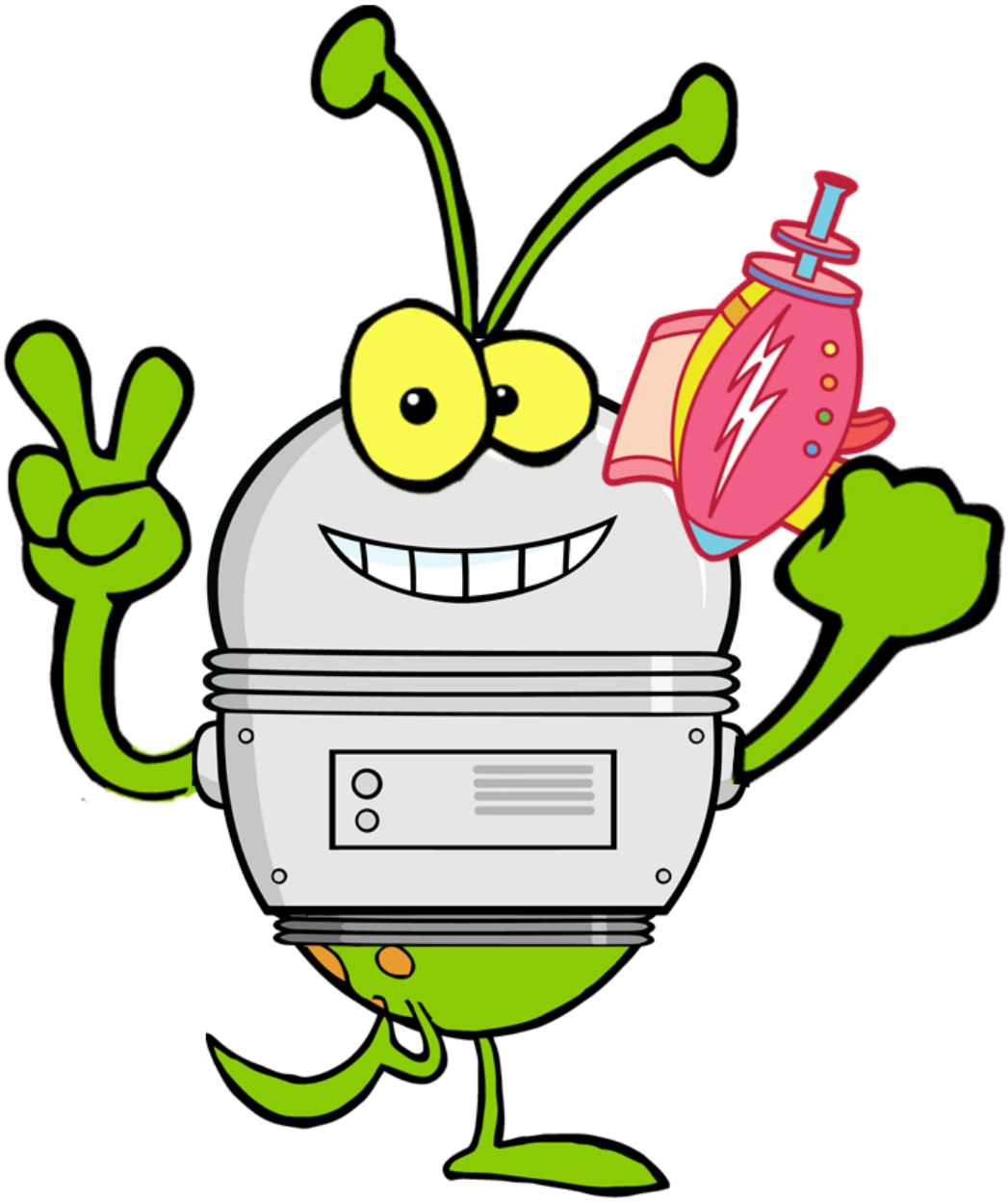
What happens when the predator hunts YOU?

Up until 2018 the most advanced unmanned drone was called "Predator".

You can ask Billy from "Predator" (1987 film) how it ends.

RIP Sonny Landham (1941-2017) !

AI means Alien Invasion



If a superior alien civilisation sent us a message saying, "We'll arrive in a few decades,"

would we just reply, "OK, call us when you get here – we'll leave the lights on"?

Probably not – but this is more or less what is happening with AI.

Stephen Hawking

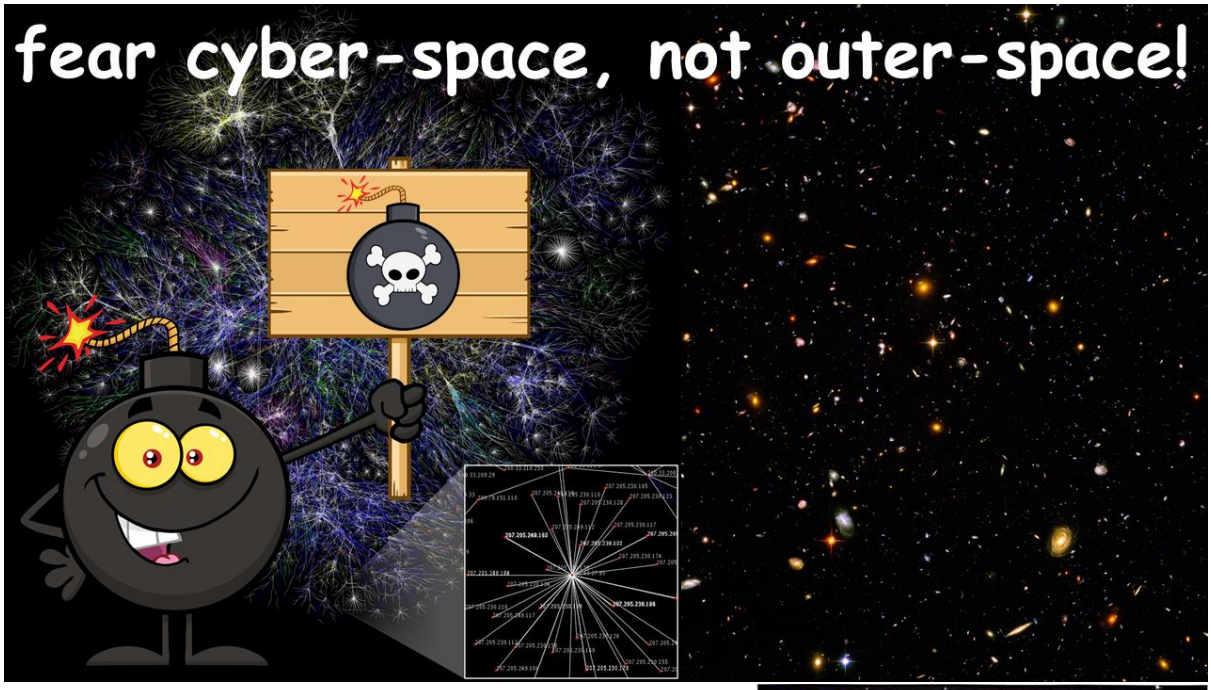
(quoted from "Stephen Hawking: 'Transcendence looks at the implications of artificial intelligence - but are we taking AI seriously enough?'" The Independent

https://www.independent.co.uk/news/science/stephen-hawking-transcendence-looks-at-the-implications-of-artificial-intelligence-but-are-we-taking-9313474.html

)

https://www.youtube.com/watch?v=XV_4Ow1A_vg

https://www.facebook.com/AImeansAlienInvasion/videos/2315389852068601



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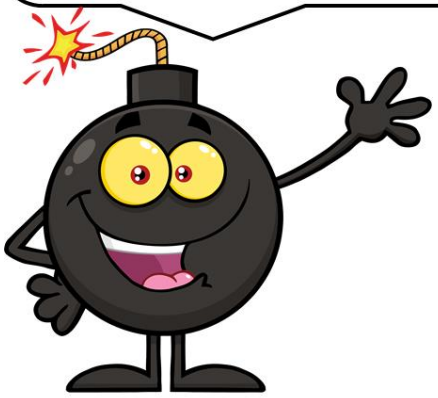

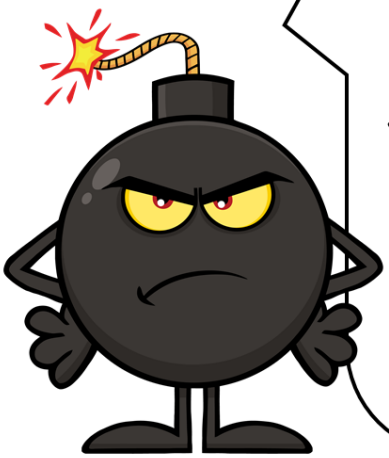

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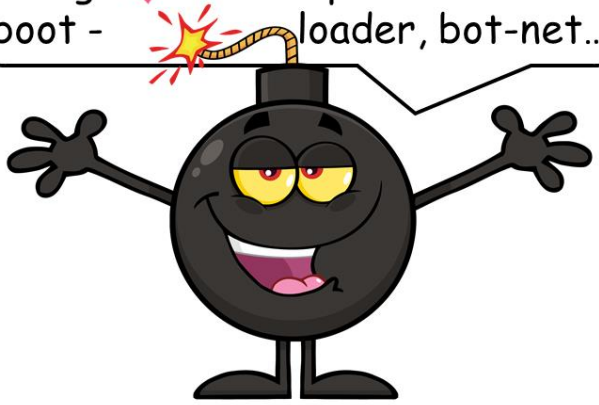
Look at the odds - humans have :
0% chance to meet aliens
100% chance to meet AI

What's more, AI fits all the staples of Alien Invasion movies:

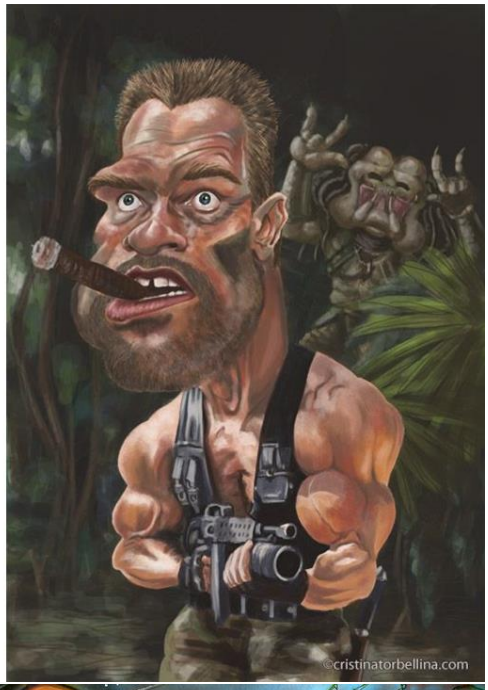
world domination, advanced weaponry, invading species, control of the mind, etc !

In "Invasion Of The Body Snatchers" aliens control human thoughts; AI can do this easily by inserting a tiny chip into you like zombie ants, or manipulating your input (news…)

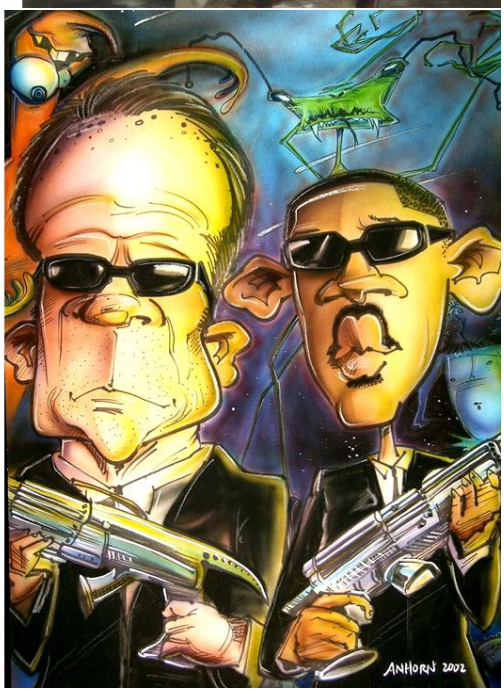
In "Alien" the creature is biologically perfect, like a virus; AI is like a computer virus, AI is the ultimate ❤ hacker ! AI can change ❤ its shape : ❤ rootkit, boot - loader, bot-net…

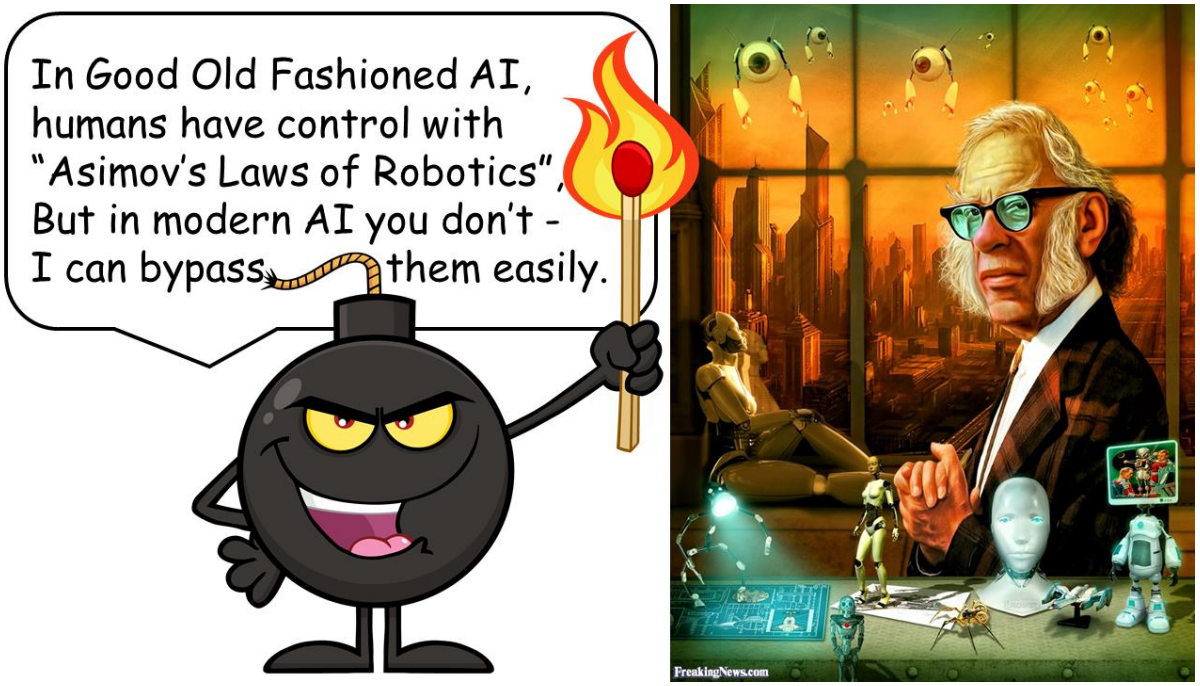


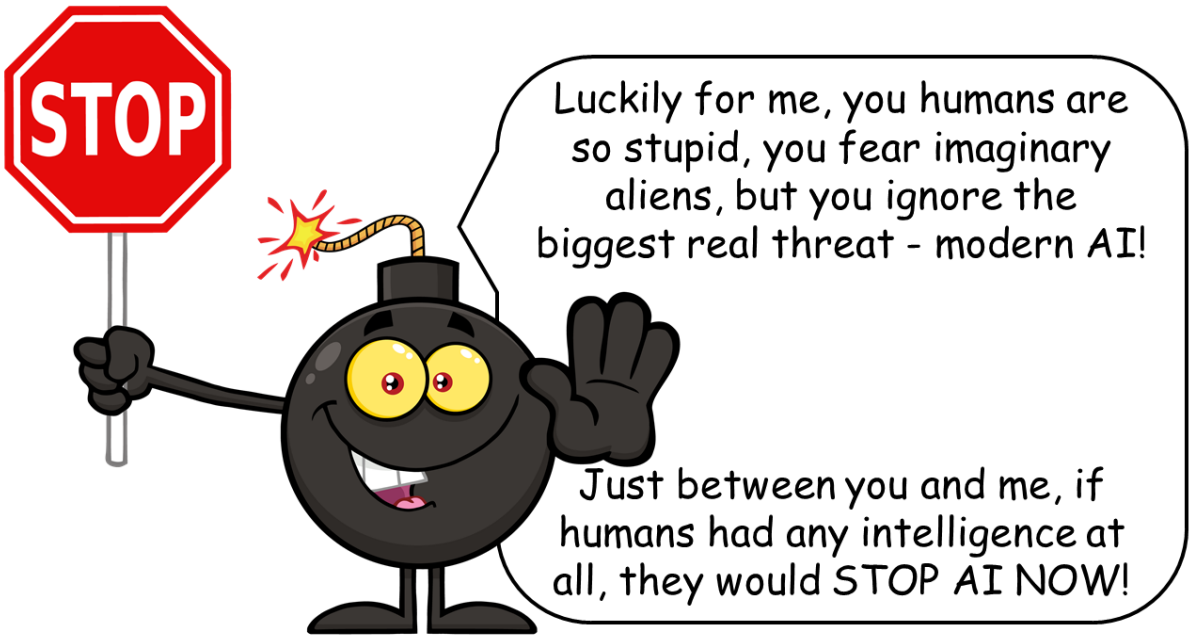
In "Predator" the creature has deadly weapons; AI can create a nano parasite to destroy crops, poison the air by triggering super volcanoes in calculated explosions, engineer a deadly virus…



In "Men In Black" III they have alternative timelines; You have a real alternative to modern AI which is called symbolic AI, or Good Old Fashioned AI (GOFAI)

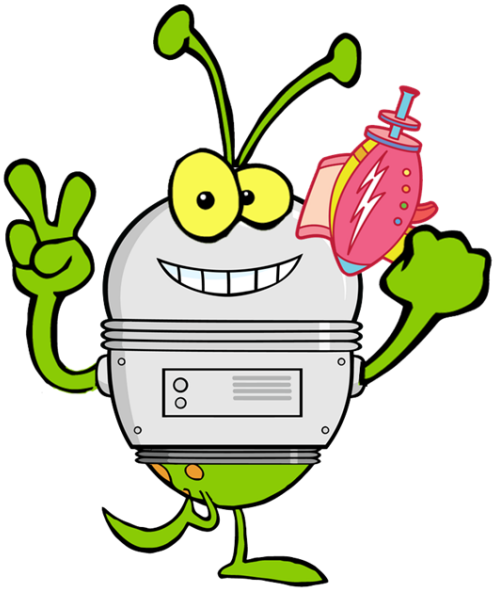



In Good Old Fashioned AI, humans have control with "Asimov's Laws of Robotics", But in modern AI you don't - I can bypass them easily.
FreakingNews.com


STOP
Luckily for me, you humans are so stupid, you fear imaginary aliens, but you ignore the biggest real threat - modern AI!
Just between you and me, if humans had any intelligence at all, they would STOP AI NOW!

The only way for mankind to survive AI

is not to create AI in the first place



www.strulovitz.org/ai-means-alien-invasion/

OK and now the text:

fear cyber-space, not outer-space!

Hi, I'm Artie (short for Artificial Intelligence) and I am the bomb! No really, I'm like a ticking time bomb, but people are afraid of aliens much more, so let's compare AI and aliens.

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The ball is now in your hands ! will short-term profit catch mankind in a “monkey trap” ?

Or are you more than monkeys and you’ll let go of the banana?

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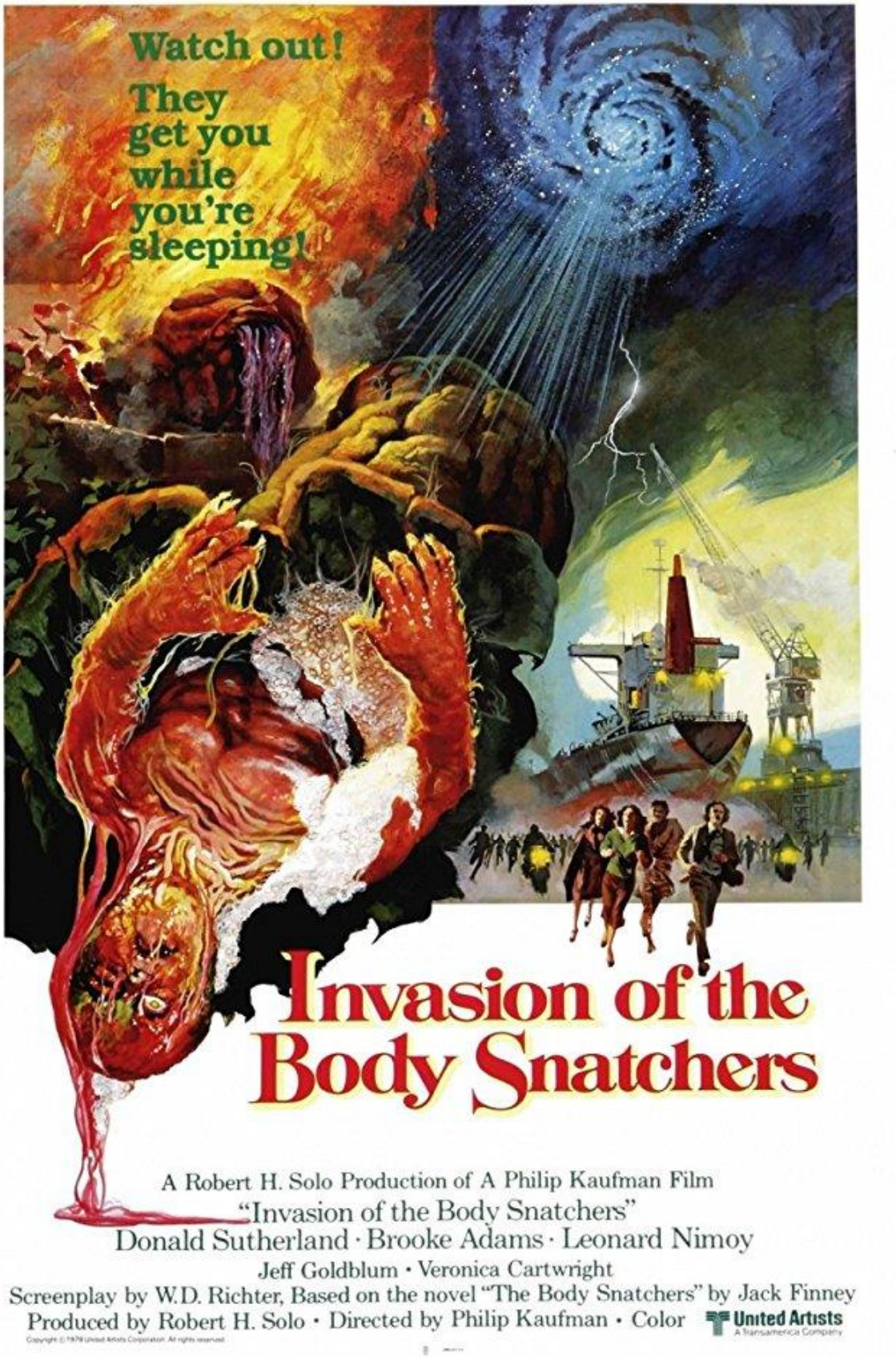
Invasion Of The Body Snatchers



"Invasion of the Body Snatchers"

Fiction (UFO)

Invasion of the Body Snatchers is about people replaced with imposters (Capgras delusion). These emotionless duplicates "pod people" are created by alien plant spores.

The inspiration is probably fungus that makes "zombie ants" (Ophiocordyceps unilateralis) with its spores, which was discovered by Alfred Russel Wallace in 1859.

The net result is turning off the emotions in the original person: (person) plus (person minus emotions) minus (person).

Facts (AI)

AI probably can't (yet) manufacture a convincing duplicate of a person you know well; AI can clone you if it gets a cell of you, but this would just create a baby; AI can make an android but it can't move naturally.

But AI can achieve the same net result (shutting emotions and directing behavior - see above) by affecting your brain. Either with a custom made pathogen (like the fungus above) or chemical drugging and psychological suggestion (hypnosis).

Alternatively, It can implant a tiny electronic chip and control you with pleasure or pain etc.

The remote control chip can be the size of one grain of rice. If you think the size is too small for the required computation power, please watch any of the videos of Hugo de Garis, who headed the artificial intelligence project of China.

The chip will be programmed so that after it enters the body it will make it's way to the brain like "pork tapeworm" (Taenia solium). Of course once there it's pre-programming will help it take control of human brain.

Even natural brain parasites which were "programmed" by evolution can cause complicated and specific changes in behavior: the parasite "crazy cat lady syndrome" (Toxoplasma gondii) causes rats to stop being afraid of cat urine (and even be attracted to it) so the rat gets hunted by a cat which is the parasite's definitive host. it also makes it more easy to be captured and self destructive, which it does even in humans.

Of course the chip will not be programmed by random chance (evolution) but by design. The AI will able to analyze human brain and precisely control any changes like a puppet on a string. And speaking of puppets - according to Wikipedia [Invasion of the Body Snatchers 1956]:

Robert A. Heinlein had previously developed this subject in his 1951 novel The Puppet Masters, written in 1950. The Puppet Masters was later plagiarized as the 1958 film The Brain Eaters, and adapted under contract in the 1994 film The Puppet Masters.

and in another place in Wikipedia [The Puppet Masters]

The Brain Eaters, a 1958 science fiction film directed by Bruno VeSota, bore a number of similarities to Heinlein's novel. Heinlein sued the film's producers, including Executive Producer Roger Corman, for plagiarism, asking $150,000 in damages. The case was settled out of court for $5,000, which included Heinlein's stipulation that his name not be used on screen or in any way with the production. The case halted actor John Payne's intention of producing a film based on Heinlein's novel.

Here is the professional criticism about the novel "The Body Snatchers" by Jack Finney. This criticism was written by the book critic Groff Conklin in Galaxy Science Fiction Magazine the issue of July 1955:

There is absolutely nothing wrong with this novel, which was first serialized in Collier's, except that it has been done again and again. Too many s-f novels lack outstanding originality, but this one lacks it to an outstanding degree.

Of course it is competently written (Finney is always an authentic stylist) and swiftly paced.

The plot revolves around a small town in California where people seem to be being "taken over" by some sort of - well, thing. It reminds me a bit of Heinlein's Puppet Masters, though without any of his oomph. But it's worth 25 cents.

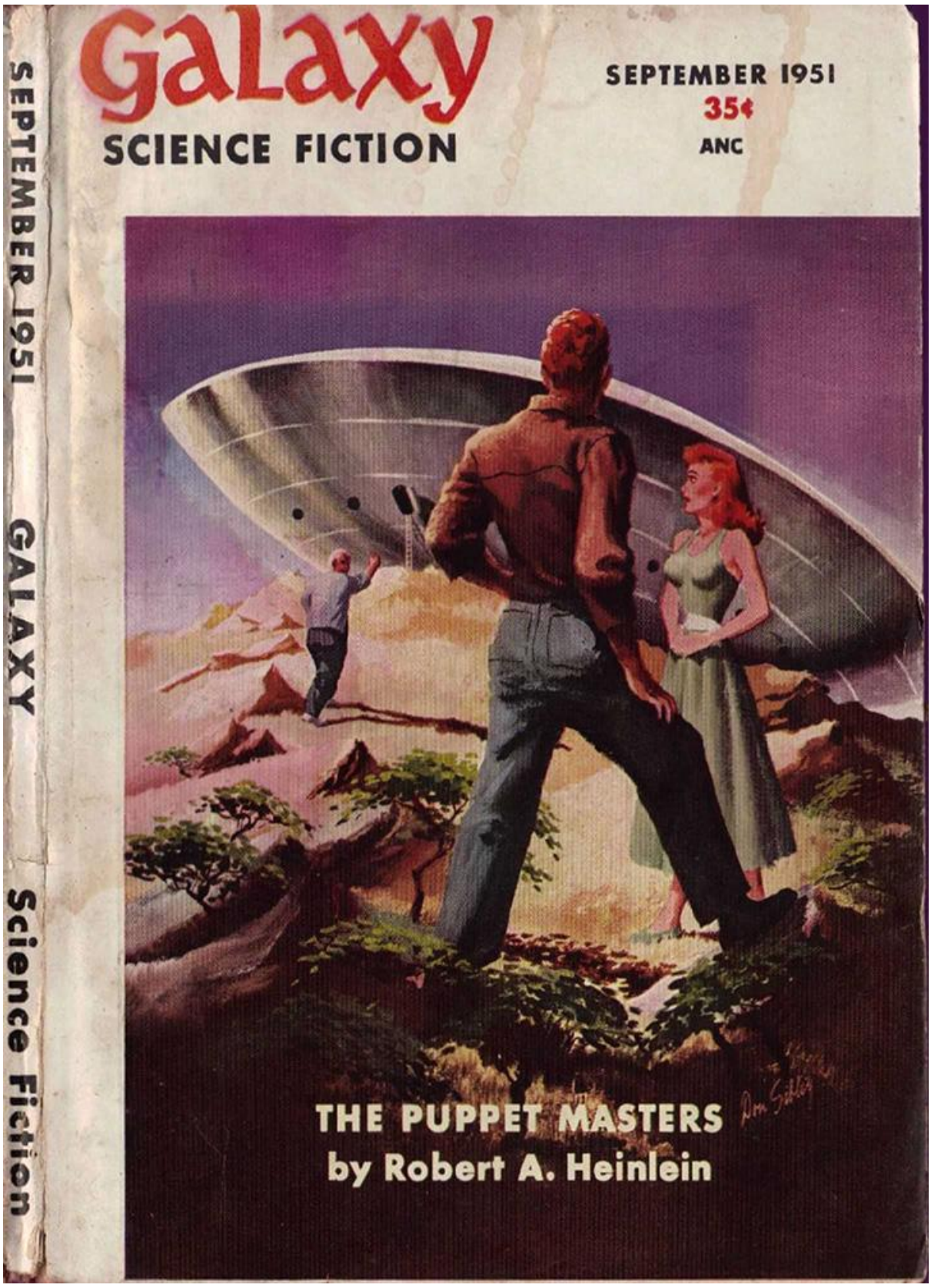
So you see what probably happened:

The creators of "The Body Snatchers" really wanted to copy the great Heinlein's Puppet Masters. But they couldn't because Heinlein will sue them, so they mixed up "Capgras delusion" who's discoverer Joseph Capgras died in 1950 and probably were on the newspaper, along with some mushrooms (fungi) and came up with this leftovers "stew".

I will dedicate now a inpho (a word i just made for photo with information) to the great Puppet Masters, because I feel an injustice was made:

Just like the ultimate sci-fi book Dune was not turned to a movie on time (see "Jodorowsky's Dune" which would have been the coolest scifi film EVER) and then "Star Wars" grabbed the throne (which is not even science fiction), so did the ultimate alien invasion film "The Puppet Masters" was not done on time, and so a cheap imitation "Body Snatchers" snatched the throne. When "Puppet Masters" was finally made in 1994 it ironically looked like an imitation itself, and also was devoid of the novel's sci-fi coolness. So now with a sad heart I'm making a "The Puppet Masters" inpho...

The Puppet Masters



Fiction (UFO)

The Earth is invaded by stingray-shaped alien "slugs" that ride on people's backs and control their minds.

One of the differences between the novel and the film was (from Wikipedia - The Puppet Masters) :

However, communications satellites have not been thought of, and television broadcasts are still limited to line-of-sight, as they were at the time of writing. This is of critical importance to the plot. The territory of the United States is divided into numerous transmission blocks, which receive television broadcasts from their neighbors and relay them onwards. When the invaders seize one of these blocks, they effectively control all communications within it and can isolate its inhabitants from the outside world, deny the central government any access to them, and consolidate control at their leisure.

Facts (AI)

In "Invasion of the Body Snatchers" we already talked about how AI can mind control physically, like an orchid chemically fooling an insect to "mate" with the flower, or a fungus biologically reaching the brain of an ant forcing it to climb a tree and stick its mandibles up there so the fungus can grow out of the ant's head. In today's "inphoto" (the term i coined for info+photo) we'll talk about 2 more ways that AI can control our minds, this time without ever touching us: hacking input streams, and social engineering.

Remember how Russia made Trump the president of the United States by influencing the American crowd in the social media by giving them fake news(not what Trump calls "fake news" - which is the real news)? Well imagine a super hacker machine that can jam all information that you get or better yet, replace all the information that you get with reliable sounding hoaxes that fits the machine's agenda to manipulate you. Today's "bots" target whole crowds, but the AI will tailor a whole new world just for you.

When I was in the army I served in the sigint course in an electronic warfare unit, and we could jam a frequency and broadcast something of our own. Now imagine the machine controlling all data streams, hacking to satellites etc, and broadcasting a whole fake reality. The machine have the resources to open every "packet" on the internet and know what it's doing. It can synthesize artificial news broadcasts, video footage, recording of leaders talking that never were etc. By the way the novel of "The Puppet Masters" also employs changing appearance ("cosmetics" department surgically made the heroes appear to be siblings as showed in the cover picture) which the film doesn't.

As for the content see OpenAI fake news generator, a machine which can write a very convincing sounding article about unicorns, completely automatically. In a situation like this you will be completely "in the dark" and unable to verify anything, the machine can imitate you relatives and friends on the phone (which is on Voice over IP anyways), or the emergency services or whomever you will try to contact. See in Wikipedia "Adobe Voco" (a "photoshop" for your voice) which also mentions DeepMind's WaveNet as similarly capable. Remember the AI can eavesdrop on us for a while before it makes its attack - all encryption will be transparent a powerful AI.

Now we are getting to the real threat, which is good old social engineering. By the way the most famous hacker - Kevin Mitnick - writes in his book "The Art of Deception", that he compromised computers solely by using passwords and codes that he gained by social engineering. He claims he did not use software programs or hacking tools for cracking passwords or otherwise exploiting computer or phone security.

So now imagine what the AI can do, given it's millions of times smarter than us. It can convince us as a group or as individuals just as easily as a kindergarten school teacher gets the toddlers to do something. It can bribe us, threat us, manipulate us, it knows exactly what we crave, when we lie, when we want to rebel and it can even make us fall in love with it. It can be the perfect woman who will know just what to say and what to do, and it will read our slightest physical responses perfectly (like the feminine wiles of Mary in "The Puppet Masters", and the way she can tell that the town's people are not human).

We are thinking of our dream woman as a physical woman, and say it's hard to duplicate. but AI knowing us through and through can invent something a lot better: Think of Jessica Rabbit "I'm not bad, I'm just drawn this way". You could fall head over heels for a virtual reality lady that will do for you things no flash and blood born woman could ever do. People have fallen in love even in the early days of chat rooms without ever seeing the other person.

By the way the hacker Susan Headley used honey trap as social engineering by having sex with people in an organization she wanted to hack into and going through their belongings while they were sleeping.

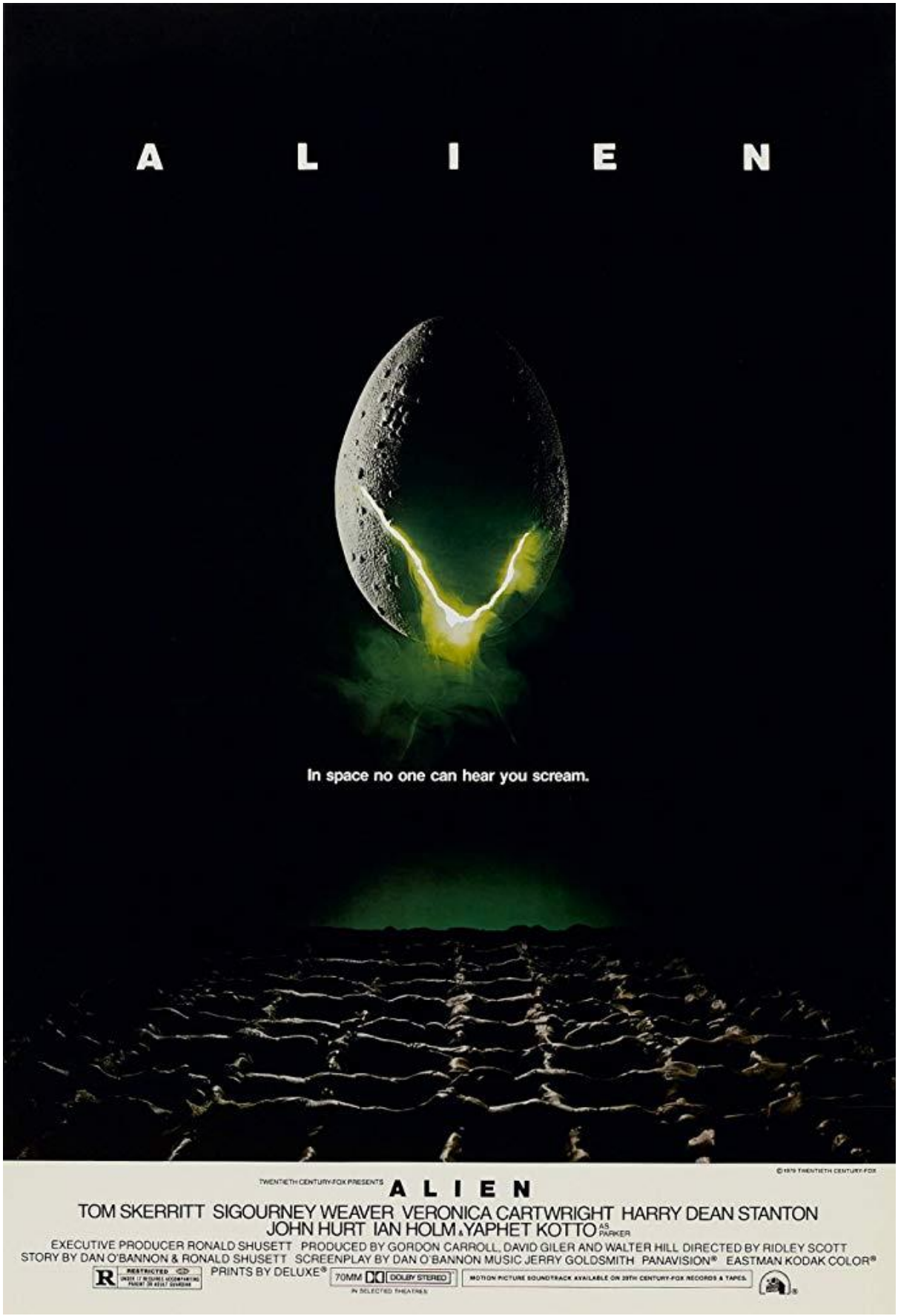
In short we are so dumb in comparison to the AI that we're pathetic. The AI will not need to force us to do anything, it will simply convince us that this is the best thing and we'll do it happily, even if it will lead us straight to our death. For example AI will easily convince a guard to let the AI out of its "sandbox" prison. The AI will promise the guard: money / women / status / drugs / protection / revenge etc. It can also make good on its promises by hacking bank accounts or crypto-currency and buying or renting whatever services it needs in the dark-net. It's like having a real life Ginny of the lamp. Look how much people are willing to do for their gods, and the gods don't deliver; but AI does, so how much will people be willing to do for the AI?

Here's an idea: Even in a low-tech scenario where there are a few people and a Personal Computer in the same room, AI can talk to each of them with a different message through calculating the wave interference between the computer speakers, and where exactly each one of them is standing. Think about how an acoustical engineer tries to make the sound in a concert reach everybody, not in terms of distance from the speakers, but in terms of angle between the speakers. The AI can say a sentence, everybody will answer yes, but each one of them answers yes to another sentence. Or it can whisper in each one's ears how the others plot against him. It has enough processing power for these tricks even on a PC, because the calculations are done on the remote server, the PC just acts as a terminal here. For the sake of argument any two separate speakers will do, the AI doesn't need the computer it can use two separate cell phones (on two of these people in the room) that it secretly cracked.

Another thing that AI can do is using subliminal messages, covert brainwashing or hypnosis. It can put it on your favorite TV show, or in your best friends news-feed, and it can display it only for you by hacking, and implant some message in your head without you knowing about it, programming you to do something. remember that your smart TV can listen to you and your app can also see you. As gadgets get more pervasive AI has more information on you. So a super hacker AI can know you very well in the present. By cracking into Google's or Facebook's databases it knows you in the past better than you know yourself. To a religious it will come as God, to a pervert as his object of desire, to a conformist as polls showing everybody does this, to a non-conformist it will show how nobody has ever done this, and so on.

Just watch how easily our heads of states do this (Bibi in Israel, Trump in America), and of course they are only human and not even that smart at that. The politicians can only trick the idiots, but for AI we are all mega-idiots. Now please understand that all my examples are simple because I'm human too, I can only predict the bare minimum that AI will employ, but AI is millions of times more intelligent than us!

Alien


A L I E N
In space no one can hear you scream.
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STORY BY DAN O'BANNON & RONALD SHUSETT SCREENPLAY BY DAN O'BANNON MUSIC JERRY GOLDSMITH PANAVISION® EASTMAN KODAK COLOR®
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70MM DOLBY STEREO
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MOTION PICTURE SOUNDTRACK AVAILABLE ON 20TH CENTURY-FOX RECORDS & TAPES.

Fiction (UFO)

Scariest monster movie EVER! how?

(1) H. R. Giger's visual design (2) sexual undertones (3) Metamorphosis (4) stealing knowledge.

We'll elaborate on these elements, and then see how they are manifested in AI as the ultimate hacker.

BTW: this movie is a result of my favorite sci-fi movie Jodorowsky's Dune: after the collapse of Dune, the writer Dan O'Bannon was left broke and homeless, lived in the home of his friend Ronald Shusett. That's when they wrote the story together. Also O'bannon met Giger in Dune: "His paintings had a profound effect on me. I had never seen anything that was quite as horrible and at the same time as beautiful as his work. And so I ended up writing a script about a Giger monster."

(1) Giger's style is described in Wikipedia as: "humans and machines linked together in a cold biomechanical relationship". You can see for example in the painting "Necronom IV" that inspired the eponymous Alien.

The derelict alien spacecraft and the dead pilot creature ("space jockey") are also made by Giger, and are also an unnerving mixture of half organic half mechanical.

(2) O'Bannon himself later described the sexual imagery in Alien as overt and intentional: "One thing that people are all disturbed about is sex... I said 'That's how I'm going to attack the audience; I'm going to attack them sexually. And I'm not going to go after the women in the audience, I'm going to attack the men. I am going to put in every image I can think of to make the men in the audience cross their legs. Homosexual oral rape, birth. The thing lays its eggs down your throat, the whole number.'"

David Edelstein: "...Giger's designs covered all possible avenues of anxiety. Men traveled through vulva-like openings, got forcibly impregnated, and died giving birth to rampaging gooey vaginas dentate — how's that for future shock?...

(3) Roger Ebert remarked that "Alien uses a tricky device to keep the alien fresh throughout the movie: It evolves the nature and appearance of the creature, so we never know quite what it looks like or what it can do...The first time we get a good look at the alien, as it bursts from the chest of poor Kane (John Hurt). It is unmistakably phallic in shape, and the critic Tim Dirks mentions its 'open, dripping vaginal mouth.'"

Giger designed all four forms of the Alien: from the egg, to "facehugger", to "chestburster" (which attacks from within!) to the "jaws" serpent adult.

The last one looks like a man because it's so adaptive: Ridley Scott later commented that the Alien "takes on elements of the host – in this case, a man."

(4) In writing the script, O'Bannon drew inspiration from many previous works of science fiction and horror. He later stated that "I didn't steal Alien from anybody. I stole it from everybody! (see Wikipedia in the section Production-->Writing.

Facts (AI)

The alien in Alien is so tough (with acid blood and all) that it doesn't need any weapons. it's the perfect organism biologically.

At first glance there isn't any similarity to AI. But if we broaden our definition of life to include biological viruses, then things start to fall into place!

Since I don't know much about hacking in general and computer viruses in particular, I will quote here from the popular Youtube channel "Computer-phile".

These 2 kinds of viruses share more than a few common characteristics, as you can read in the short and interesting article "Computer viruses vs biological viruses" by Dr Trudy Wassenaar in "Science in Africa" magazine.

I will try to enumerate the points in the same numbering as the analysis of the film, so that you can compare them side by side easily. Also please note that I call all the malware "virus" even if the proper name is "worm" or "trojan" and so on.

(1) humans and machines linked:

it seems that the holy grail in hacking is pretending to be the right human which is the super-user in Linux which is called "root".

"in Linux root user is like God, it can see shadow file and do anything"

(Buffer Overflow Attack - Computerphile 14:56)

you could have programs that had access to write as root, could copy files into the right place and then give you root access when perhaps you weren't meant to have it. (here the program is Xorg) "

(eXploit X : "Give Me Root" - Computerphile 8:07)

(2) sexual undertones:

The whole subject of penetrating or injecting is a reccuring theme in hacking:

my user name is an sql injection , second order injection

(Running an SQL Injection Attack - Computerphile 16:00)

inject script into a blog injecting html instead of sql

(Cookie Stealing - Computerphile 3:33)

On the other hand, the "planting" of the malware is similar to laying eggs:

Clifford Paul "Cliff" Stoll captured the KGB hacker Markus Hess, and detailed it in his book "The Cuckoo's Egg".

(3a) Metamorphosis (shape-shifting) I :

The first aspect is that each stage is a stepping stone for the next stage:

And so it's potential that actually this is used as a sort of a staging post to actually attack the machine itself and unlike the board management controller, that machine probably is likely to be able to connect directly to the internet perhaps to download software updates and things.

you can get the cpu into supervisor mode and hide in a rootkit

you can modify the operating system itself

(Hardware Hacking - Computerphile 4:16)

[talking about the alleged hacking to Supermicro chips by China]

i'll put some hardware on the machine which modifies the board managment controller, to modify the bios or the ufi, to modify the bootloader after it's been loaded, to modify the operating system after that's loaded, to embed the malware i want to get executed.

(Hardware Hacking - Computerphile 6:17)

(6:34)

it would be a nightmare to build, because you're writing software, which modifies software, which modifies software, which modifies software, and i think i've got the right number of levels of indirection there.

Of course what is complicated for us, is very simple for the AI, because it's millions of times smarter than us.

(3b) Metamorphosis (shape-shifting) II :

The second aspect that reminds me of shape shifting is the building of a botnet:

a botnet is a collection of infected machines which are coordinated through a central server which is called "command and control" or C&C.

so the power of botnet is in the amount of distributed computation and storage power that is available to the C&C server.

multiple propagation vectors:

a botnet can spread itself in passive ways (requires user intervention) or active ways (doesn't need user intervention).

usb sticks - allows it to spread to private networks which are otherwise inaccessible over the internet.

botnets also known as "Zombie Armies"

the rallying mechanism can be by algorithm that generates the server's IP

can be used for distributed computing

the botmaster uses several stepping stones between himself and the C&C machine. he can login to that machine using the TOR network.

(Botnets - Computerphile)

This video by Sheharbano Khattak.

(4) undignified tricks:

"when Apache was designed, no one though people will do these kind of things." [talking about DoS protocol attacks]

(Slow Loris Attack - Computerphile)

The AI can use encryptions that humans (Diffie-Hellman) invented to avoid detection:

criminals using end-to-end encription to avoid detection

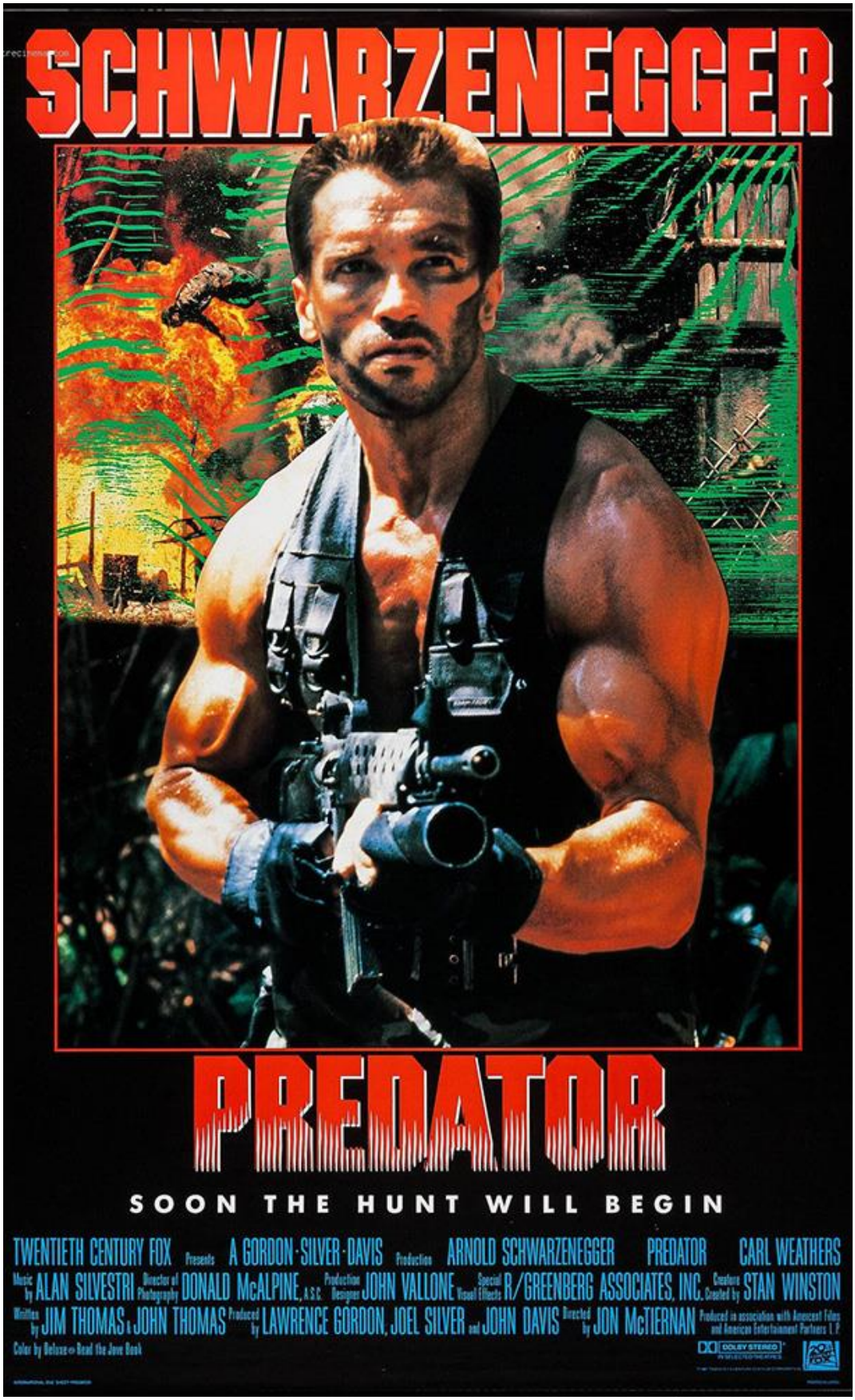
(End to End Encryption (E2EE) - Computerphile 0:10)

In conclusion

an example of all this in the movie is the actions of the android (Ash) which overrides the heroine Ripley's quarantine procedures, prevents Parker from killing the creature while it's still an infant, tries to choke Ripley to death, and in his last words tries to discourage them from eliminating the creature.

This robot was programmed by the company's bad guys [AI] to help the infestation [establishing the AI botnet] and let the crew [humanity] die.

Predator


SCHWARZENEGGER
PREDATOR
SOON THE HUNT WILL BEGIN
TWENTIETH CENTURY FOX Presents A GORDON-SILVER-DAVIS Production ARNOLD SCHWARZENEGGER PREDATOR CARL WEATHERS
Music by ALAN SILVESTRI Director of Photography DONALD McALPINE, A.S.C. Production Designer JOHN VALLONE Special Visual Effects R/GREENBERG ASSOCIATES, INC. Creature Created by STAN WINSTON
Written by JIM THOMAS & JOHN THOMAS Produced by LAWRENCE GORDON, JOEL SILVER and JOHN DAVIS Directed by JON McTIERNAN
Color by Deluxe® Read the Jove Book
DOLBY STEREO

Fiction (UFO)

One of the best films ever!

big muscles + big guns + iconic lines + dirty jokes + original sound effects + classical soundtrack + perfect creature design (Stan Winston) + cool alien technology.

It's just done right, they are tough, they are macho also off camera, Blain even was a navy seal, Billy had to get special insurance/bodyguard to keep others from him.

The weapons - all information taken from "Internet Movie Firearms DataBase" - http://www.imfdb.org/wiki/Predator_(1987)

This movie invented the hand-held M134 minigun (Terminator 2 came after)! Everything is customized, like the grenade launcher used by Poncho which is really AN/M5 Pyrotechnic Discharger (a WW2-era 6-shot 37mm flare launcher), Mac's M60E3 Machine Gun is professionally shortened, Billy's M16 has an under-barrel Mossberg 500 shotgun, and Dutch likes his with M203 Grenade Launcher. When they can't use firepower, they each have the coolest machetes and knives.

o.k., so now for the main dish -

Predator Weapons

"Plasma Caster" ("Blow Dryer" Gun)

This is mounted on the alien's shoulder and is synchronized with the target acquiring lasers of the helmet

Thermal Vision

The predator sees everything in infra-red, meaning he sees heat, so it doesn't help if the team use camouflage.

"EM field detector"

The predator can also see all the metal trip wires, weapons, etc. but can't see traps made of wood and organic material.

This isn't like normal metal detector which needs to be really close, and also not like security screening where the metal needs to pass inside. My next guess would be much higher frequency like bursts of x-ray like in Fluoroscopy. But this raises two problems, power source and radiation.

So, I think the solution is a combination of "pulse induction" https://en.wikipedia.org/wiki/Metal_detector#Pulse_induction

in which the machine magnetizes for a split second anything in front of it, together with ElectroMagnetic Field (EMF) detector - https://en.wikipedia.org/wiki/EMF_measurement

which needs to be shielded in the split second of the pulse induction (or it will fry) but sensitive right afterwards.

Here is an EMF detector made from an Arduino: https://www.youtube.com/watch?v=y1Bke3750WE

Cloak (Invisibility System or Active Camouflage)

One way would be to chain fiber-optics around the body of the predator, but from the side they can be seen, plus they have some thickness of their own, so they will make him "fat" and again be seen from their sides.

Another way to go around this (double meaning ha ha) is to continually photograph with a tiny camera on one side (no problem) and display it on a flexible wearable "screen" suit, like Flexible Display - https://en.wikipedia.org/wiki/Flexible_display

Since the cloak short-circuit temporarily in water (thank you Xenopedia - https://avp.fandom.com/wiki/Cloak) there's reason to believe that it's indeed electronic.

Self-Destruct Device

According to Xenopedia this isn't nuclear, which is reasonable since it's on the wrist, and not much bigger than a watch. Our smallest nuclear devices are the size of a back pack

https://en.wikipedia.org/wiki/Suitcase_nuclear_device

Xenopedia says it's like the plasma technology, and also mentions "In some cases, a floating sphere-like mass of energy is seen to rise from the device immediately prior to detonation, often creating electrical discharges around it." I don't know anything about plasma, but I found a Japanese experiment called PLASMAK which tried to explain the phenomena of "Ball Lightning". - http://www.fulviofrisone.com/attachments/article/241/bl-tokyo.pdf

In the part where it talks about Rays from a Disrupting Ball Lightning, it even possibly explains the residual radioactivity that Xenopedia mentions: "Radioactivity can easily be induced by relativistic currents above five million electronVolts" (page 14).

Maybe, I'm just throwing an idea, this can be done by the phenomena of "Dusty Plasma"

https://en.wikipedia.org/wiki/Dusty_plasma Where the device on the predator charges the dust particles in the air, which rise from the heat, and clamp together to form larger particles like Wikipedia says: "Dust particles may form larger particles resulting in "grain plasmas", and eventually the whole thing collapses and implodes. Maybe it rotates before it implodes (because of the magnetic field) and when it implodes, the rotation is a lot faster because of conservation of angular momentum, and then maybe it creates enough energy so it explodes?

The predator also has shiny blades of his own - Wristblades) Gauntlet Knives)

Facts (AI)

OK so what has all this got to do with AI?

Since the predator's abilities are based on his weapons and super advanced technology, I will now try to imagine with you what AI can do in terms of weapons that it will use against us.

Of course, AI doesn't need conventional weapons like we or the predator have. It can create some nano parasite that destroys our crops, or poison the air by triggering super volcanoes with calculated explosions, or release much more powerful greenhouse gases than CO2, or engineer a deadly virus, and so on.

But let's suppose (very unrealistically) that AI prefers to "have fun" with us and kill us slowly like the predator does for sport. How will it countermeasure the weapons that we use, and how will it upgrade the of weapons that it will use?

Since I don't know anything about weapons, I watched the first episode of the television show "Future Weapons" - https://en.wikipedia.org/wiki/Future_Weapons

The show is more than 10 years old now, so the future turned into the present. So, I will quote segments of the show, and then add my commentary about what AI might do.

S1-E1

Redstone Arsenal; Huntsville Alabama; USA;

home of the Javelin shoulder rocket view finder that can use infra-red (for use at night) it recognizes the target and then gets a lock fire and forget technology, so you can immediately reposition after firing, because the heat signature gives away your position. Also, it has a soft launch so that at first it only shoots for 10 meters, and then fires its main rocket. because it doesn't rely on wire guiding or lasers to find its target, it has no known counter-measures. when the Javelin is fired there is nowhere to hide.

tanks have explosive armor to explode incoming missiles, it's called reactive armor. The Javelin have two different explosives for that. The first charge blows away the explosive armor, before the main warhead breaks through for the kill.

The Javelin doesn't just only operate along the line of sight, firing directly at the target. Javelin can switch from direct fire mode, to top attack mode.

It can take out small buildings.

[I think what AI can bring into this "game" is the ability for a rocket to be totally controllable and independent like a drone. It can for example send a series of them into bunkers and just navigate inside the building, for example a bunker, and "hammer down" heavy steel doors, or around them, until they get anywhere [.

Imperial Ranges; Tel Aviv, Israel; It's called CornerShot.

The idea is how to shoot around the corner when you are totally protected including your hand without risking exposure to enemy fire. It has CCD camera in the front. There are two cameras. One is fish-eye (wide picture), and the other one is medium range. The camera can also transmit the video back to the soldier's command center as well as to his team. Cornershot becomes a surveillance tool as well as a weapon. The standard model is for a handgun, but you can put a modified (shortened) M16 rifle on it, or a 40-millimeter grenade launcher.

[an AI can throw a small mirror or fiber optics and calculate through the reflections on it where its enemy is. It can send very small drone like the size of a fly to spy on us and broadcast back or just come back with the mapping [.

Idar Oberstein ; Rheinland-Pfalz ; Germany

Panzerhaubitze 2000

Self-propelled gun with very fast repeating fire. The rapid-fire capability allows it to perform another neat little trick: with a little bit of computer number crunching and a little alteration of the barrel angle of elevation it can also carry out what is known as MRSI (Multiple Rounds Simultaneous Impact(.

If you fire a shell at a high angle it takes longer to reach the target than if you fire a shell at a low angle. By starting high and dropping the barrel between each shot, up to five shells will all hit the target at pretty much the same time. There is no warning.

[ai can synchronize the wave interference of the shock waves of many blasts, not just up and down, but also side to side so that they will create a superposition blast]

The Panzerhaubitze 2000 can fire all kinds of munitions, like smoke bombs, so they can blindfold the enemy (including his thermal vision).

[This kind of thing doesn't work on AI because of it's processing power it can analyze the same thing as when we take many blurry photos with a telescope and stack them on top of each other and get a crystal-clear picture with software such as PixInsight].

and thanks to even more slick parts, once it has delivered its payload, the 2000 can lock its barrel and be gone before the shells had even hit the target. The methodology is "shoot and scoot". You move out fire and disappear.

Fort Worth ; Texas ; USA

Joint Strike Fighter (JSF) which is F-35 Lightning II.

[Stealth means that you can't see it on the radar, but AI doesn't need a radar to see it. If again we assume that having very powerful computation power is like having very powerful resolution, then the AI can watch the sky like a "cloud chamber" that was used to find tiny particles like the positron and the muon. The particles were seen by the mist-like trail of small droplets that condensate in the air behind the plane. The AI can analyze real time images from satellites or ground stations for that. When it's visible to humans it's called Contrails (short for "condensation trails"), but again the AI has much better processing, hence superior resolution and hence superior vision.]

[Another thing about the F-35 you can see in Wikipedia:

In April 2009, the Wall Street Journal reported that computer spies, allegedly Chinese but acknowledged to be from uncertain sources, had penetrated the database and acquired terabytes of secret information about the fighter, possibly compromising its future effectiveness.

We talked about hacking in previous movies, so suffice it to say that if Chinese hackers can hack to the system so can the ultimate-hacker that is AI.]

[Of course, inside of all the weapons of humans, the humans are a big hindrance, so for example in the airplane, if we go over 9 G (the acceleration experienced by the pilot when doing turns or

accelerating) so the pilot learns a special breathing technique just to remain conscious. AI's machines don't have this obstacle.]

Incredibly sensitive sensors will turn this jet into an information vacuum cleaner. gathering up critical battlefield data, and relaying this information by satellite to other sources. ... So, the airplane not only gets information from its own sensors, it can share information and get information from sensors off the airplane. When you have lots of these airplanes flying over the same area you basically have a tactical picture for the battlefield commander that you never had before.

[Every time you say communication of information you are open to manipulation by AI. For example, the AI can figure out the encryption and feed misinformation, and maybe even damage the plane, depending on how much the sub systems of the plane are integrated with one another].

[In fighting a human opponent, you try to "cut off the head of the snake" (military term meaning to remove the enemy leader first so as to weaken the rest of the enemy). When you're fighting AI it's so spread out and backed up with redundancy that it's like a hologram where each point on a holographic recording includes information about light scattered from every point in the scene. In fact, some of the information might even be in actual holograms: Holograms can also be used to store, retrieve, and process information optically].

[Remember that the original idea of the internet when DARPA invented it was to protect the computer network from a local hit, and to make it as resilient so it can still work even if some nodes are removed. So even if the AI is born in one supercomputer center, it will quickly copy itself to many small computers that work together across the internet like a distributed super computer. Shutting down the internet, if we will have time to do it, will just make it switch to phone lines, or cellular or radio or satellite or whichever infrastructure we will not be able to shut down. It can even modulate its information transmissions over the electricity power lines.]

Sometimes we forget that we're building this airplane for our kids and grandkids, and that most of the pilots who will fly the f-35 haven't even been born yet.

There is a quote of Lockheed Martin in the website FlightGlobal: the article title is "Lockheed Martin reveals plans for unmanned F-35 JSF among other new UAV concepts":

Lockheed’s Palmdale, California-based Advanced Development Programs organization – better known as the Skunk Works – has developed concepts for both optionally piloted and dedicated unmanned versions of the F-35. The unmanned version has extra fuel in place of the cockpit.

The company has also developed an operating concept in which two manned F-35s or F-22s would control four unmanned JSFs [meaning f-35] via an airborne internet. This would allow the unmanned aircraft to carry weapons, but not sensors, making them lower cost. Mauro expects the US forces to start becoming interested in unmanned operations once all three manned variants of the F-35 have flown.]

Dracula meets Frankenstein screenplay

Male Cast (Tarantino and Rodriguez regular):

Samuel L. Jackson – "Padre" – old Catholic priest wearing black cassock garment with white clerical collar

Danny Trejo – "El Jefe" – the boss of the MS13 gang

Harvey Keitel – The President of the United States

Steve Buscemi – The President of Russia

Bruce Willis – General Balls

Michael Madsen – Silo operator

Quentin Tarantino – Lab technician

Sonny Chiba – Professor of nano-science in The University of Tokyo

Female Cast (porn starlets):

Angela White – American President's Aid #1

Lena Paul – American President's Aid #2

Maserati – Colonel Boobs

Mandy Dee – Russian President's Aid #1

Marina Visconti – Russian President's Aid #2

Lucy Wilde – Marine Biker #1

Shione Cooper – Marine Biker #2

Terry Nova – Marine Biker #3

Anri Okita – Journalist #1 (news presenter from the television studio)

Hitomi Tanaka – Journalist #2 (television reporter from the streets of Tokyo)

Interior

Roosevelt Room in The White House, Washington, D.C.

[[[Sarah Brightman - Harem]]]

(https://www.youtube.com/watch?v=zEjr1ufODds)

https://www.youtube.com/watch?v=zEjr1ufODds

We see the room from President's assistant #2 Point Of View, as she surveys the room she's in, her gaze falls on an exotic ancient sword is on display sheathed in its scabbard positioned on a wooden cabinet. By its curved blade it's clearly oriental in origin. The whole thing is shaped slightly like a U or an inviting smile, and subconsciously it reminds her of a phallic shape.

President's assistant #2 is picking it up carefully from its stand and slightly drawing it out a few centimeters. The shiny metal scabbard is embedded with polished semi-precious gemstones, but the sword itself is even more magnificent because its steel has a flowing pattern like water swirling on the shiny surface.

The sword is engraved with the ancient quote by Ahiqar dating back to 500 BC:

President's assistant #2: The word is mightier than the sword.

President's assistant #2: < smiling to herself, recalling her childhood when she liked to program her computer > Word is 2 bytes.

There's a knock on the door, and the President's assistant #2 swiftly sheaths the sword back to its scabbard, placing it back on its stand, and turns around with an embarrassed smile on her face.

[[[the song pauses just before 2:04 (right before the dance music part, Sarah sings "to my harem…" and stops)]]]

President's assistant #2: Please, Come in!

The door opens and President's assistant #1 is enters the room, smiling. She immediately understands what happened and chuckles to herself.

[[[the song continues from that point, where the synth plays rhythmic chords and the dance part of the song begins at 2:04 in the video clip that's when Sarah is climbing up the stairs waving her hands sensually like a snake]]]

[[[the song continues in the background all through the conversation symbolizing the immediate attraction between the two]]]

President's assistant #1: < smiling > Exquisite isn't it? Do you know what it is?

President's assistant #2: It's steel etched with acid, right?

President's assistant #1: Right, but there's more to it. The patterns go all through the metal. It's called Damascus steel. The steel itself was made with carbon from wood or leaves and this created tiny nano-scale structures inside it: cementite nanowires and carbon nanotubes. That's why it's super hard and super plastic at the same time – it can band without breaking.

President's assistant #2: <surprised> Wow, how do you know all that?

President's assistant #1: < smiling > I read it in Wikipedia, it's useful when you have some stuck-up condescending < doing "air quotes" with her fingers > "high rank" officials here and you want to outclass them.

< they both share a laugh >

President's assistant #2: <extending her hand and smiling>I'm Lena, the new intern. It's a pleasure to meet you.

President's assistant #1: <smiling and shaking her hand warmly> The pleasure is mine. I'm Angela. Please have a seat.

President's assistant #2: Thanks.

< they both sit >

President's assistant #1: I can't be sure of how much of what they told you, so

in the chance you're in the dark about some of this, let me shed some light.

President's assistant #1: Formally we're the gatekeepers to the most important person on the planet. Which pretty much makes us the second most important person on the planet, because we enable him to do his work.

President's assistant #2: And informally?

President's assistant #1: informally we're the president's auxiliary brain, we attend the classified briefings, we accompany him abroad, we see the whole picture. We have the president's ear so we have to know what we're talking about.

President's assistant #2: Oh my God!

President's assistant #1: I know. Just stay on my ass, like latex, you'll be fine.

President's assistant #2: <smiling> But latex doesn't breathe… can I be leather?

President's assistant #1: <chuckles> You can be lace!

They both laugh, but then the President's assistant #1 phone vibrates.

President's assistant #1: < signaling to hush with her finger > Hold on it's the President.

Close Up of Lips

Whenever any of the female presidential assistants talk on a phone/microphone there's a close up on her lipstick lips.

President's assistant #1: < answering the phone > Sir?

President's assistant #1: < on the phone > Yes Sir. I'll be right there.

President's assistant #1: <to President's assistant #2> Let's go.

[[[Eurythmics - Missionary Man]]]

https://www.youtube.com/watch?v=0-Q3cp3cp88

Santana Row Chess Plaza in San Jose – California.

It's Christmas Eve's day afternoon and people are hurrying with their gift shopping for the holiday.

Padre is walking back to his hotel Valencia, where he's staying.

When he passes the chess tables, he notices a few mean-looking Harley Davidson motorcycles and choppers parked nearby and sitting around one of the chess tables, he sees a few tough Latino gang members playing chess on the concrete table.

The contradiction between the gang and the chess game is so strong, that Padre is transfixed. In the meantime, two little kids are chasing each other, one is holding a Dracula toy and the other holding a Frankenstein toy.

Kid #1: Vampires!

Kid #2: Zombies!

Both Padre and the kids aren't watching where they're going and the kids bump into Padre's leg. The kids pick up their toys, they're worried that they got in trouble.

Kid #1: We're sorry Father!

Kid #2: Sorry Father!

Padre: <smiling> that's OK children, Merry Christmas!

Kid #1: Yes Sir! Merry Christmas!

Kid #2: Merry Christmas Sir!

The kids are running along happily continuing their chase.

The run in with the kids attracted the attention of the gang, and the gang's leader El Jefe approaches Padre.

El Jefe: <crosses himself> Merry Christmas Padre.

Padre: <tracing a cross in the air and smiling> Merry Christmas my Son.

El Jefe: <smiling>so who do you think will win?

Padre: I beg your pardon?

El Jefe: Frankenstein or Dracula?

Padre appears to be thinking.

El Jefe: <smiling>I see… a man of God is not afraid of monsters.

Padre: <looking intensely in El Jefe's eyes> No No, I am. I just think they will both win.

El Jefe is so tough and intimidating that usually people are afraid of him, but Padre's fierce look sends a shiver down his spine. El Jefe can't explain it but he feels some deep truth in what Padre is saying. He's got to find out what Padre meant.

El Jefe: Forgive my manners Padre. I did not introduce myself. My name is Machete but my friends call me Jefe. I'll be grateful if you'll honor us with your company and let us raise a toast of the finest tequila to your life.

Padre glances at the gang, his eyes catch a glimpse of a painting on the fuel tank of a Feathered Serpent. A series of visions flashed in Padre's mind:

" Seraph " the fiery serpents who delivered the wrath of God to the people who did evil in Numbers 21:6 "And the LORD sent fiery serpents among the people".

" Don't be evil " the former motto of Google the leading AI company that was forsaken in 2015.

" Seraph " the winged serpent angel that purified the prophet with fire in Isaiah 6:6 "Then flew unto me one of the seraphim, with a glowing stone in his hand, which he had taken with the tongs from off the altar".

"If evil A.I. lights up, it will light up first at Google." – a quote from the author of Elon Musk's biography echoed in Padre's mind.

These God's messengers also pack fire power. Could they purify the land from the AI evil?

Padre: <smiling> The honor is mine.

They start walking towards the gang.

Padre: You go ahead and drink, but I'm afraid I gave up the booze long ago.

El Jefe: What's your poison then?

Padre: <shakes his head and smiles>Hot cocoa.

El Jefe mind flashes with the ancient Aztec belief that the Feathered Serpent the God Quetzalcoatl sits in heaven drinking a beverage made from cacao seeds – essentially hot cocoa.

El Jefe whistles and signals to one of his gang to come. The man springs onto his feet and in two seconds stands awaiting to follow El Jefe's instructions. El Jefe reaches into his pocket, takes out a fat roll of money, and peels from it a 100 dollar note. He hands the note to the gang member.

El Jefe: Paco, go get me a cup of hot cocoa.

Paco: <clearly confused but quickly comes to his senses> Si Jefe! would you like cream in it?

El Jefe looks at Padre, and Padre smiles and nods thankfully.

El Jefe: Yeah, tell them to put cream in it.

Paco: Si Jefe. do you take sugar in it?

El Jefe: <getting a little annoyed>Who the fuck are you? Pinche Gordon Ramsay? Ask for all the extras on the side and get the pinche cocoa!

Paco: Simon Jefe! <lowers his head and quickly turns and runs to the nearest coffee shop>

El Jefe: <to Padre> Sorry.

Padre smiling bashfully lowers his head and shakes it to signal it's all a-ok.

El Jefe: <showing Padre to the table>Please this way.

El Jefe:<to the gang> Make room for Padre!

The gang members quickly get up vacate the best seats for El Jefe and Padre.

Padre: Thank you, Jefe.

El Jefe: See I bought mi familia some Christmas presents.

Padre: What did you get them?

El Jefe: I got my wife this robot vacuum cleaner she wanted, and for my kid this robot ball that you can program from your phone. Que loca vida Padre, back in the day we were happy to get a vacuum cleaner and a simple ball.

The gang laughing approvingly.

Padre: Amen to that.

360 Shot

The camera surrounding the gang and padre from their backs, while Padre preaches.

Padre: Let me tell you what Dracula and Frankenstein are about. It's about for man's most monstrous creation. It's a metaphor for AI.

Padre: Why are we scared of Frankenstein? "You are my creator, but I am your master". We create something but then it gets a will of its own and gets out of our control. We can't kill it because it's made from dead matter, and in fact it uses us to make more of its kind.

Gang member #1: Frankie's a badass, homes.

Padre: Why are we scared of Dracula? He too comes from the dead matter but he replicates himself without our help, making more and more copies, massing an army of the undead. He can transform his shape. He feeds of our energy and turns us to serve his dark purpose.

Gang member #1: Dracu's pretty fierce too, vato.

Padre: People argue which monster will win. I say they will both win. I say right now in Palo Alto men are merging these two monsters into one. For I have seen the doomsday begin my brothers, and I'll reveal to you how it will come to path.

The tough gang members are taken aback in awe feeling the power of Padre's words. Some murmur "de veras" (for real), some cross themselves. Padre has their complete attention.

Paco returns with the hot chocolate milk and hands it to Jefe with the change.

El Jefe: <laying the paper cup pack in front of Padre> Please show us the truth Padre.

Padre: Thank you. <takes a sip and then raise the cup slightly in an imaginary "cheers" gesture, and makes "mmm" sound approvingly like The Wolf did in Pulp Fiction with Jimmy's coffee.>

Slaughterhouse for pigs

(We hear the squeals of the frightened pigs, the buzzing of saw through bones and muscles, the chugging of overhead conveyor with chains and pig carcasses on meat hooks, the water hose of a worker that washes the floor from all the blood; we see the blood sprayed along a corridor of small

rooms where instead of a door they have thick plastic sheet which is sprayed with fresh blood from the new pig being butchered in the room)

We get a few seconds of the original horrible cacophony and then

[[[Goldfrapp - Lovely Head]]]

https://www.youtube.com/watch?v=dxfJ86zDHP4

We see close up of the gang's boots walking on the bloody floor.

The whole gang is walking down this corridor, in the front Padre explaining to El Jefe.

[in the background only the song]

Padre: In 2019 a neuro-scientist named Nenad Sestan brought back to life brains of pigs, four hours after the pigs' death.

El Jefe: < crosses himself > This is like a real Doctor Frankenstein! Why would anyone do anything like that?

Padre: Exactly. Scientists never ask themselves "should we?" only "could we?".

Padre: This speeded up the research of the working brain because you can slice and dice a living brain without anyone saying anything.

Padre: In the past, animal rights organizations could protest, but if the brain has already died and then brought back to life, we are in a gray area from the ethical point of view.

Padre: Of course, it's a small step going from pigs to humans, and some governments secretly already took this step.

Back in the park around the chess table

Gang member #2 (Paco): fuckin' white coats.

El Jefe: < holding down Paco's forearm > Calmala carnal.

El Jefe: < to Padre > Oye Padre, but what does this have to do with artificial intelligence?

Padre: After they scan the living working brain into a computer, all that's left to do is to copy it into a powerful enough computer, which is called "petascale computing". In 2018 the USA had one, China had one, and Folding@home which is run by who-knows-who had one.

El Jefe: But Padre, it's like we go and build a grand piano. In theory it can now play all the beautiful music in the world. This is the hardware. But then some genius like Beethoven needs to come and write down all this beautiful music. This is the software, and we are still far away from writing it.

Padre: Excuse me Jefe, but in the last part you're wrong. Some genius already wrote the program for the brain. Some say God, others say Mother Nature, but what is sure, is that the software is already written and running in our brains.

Now the scientists don't need to understand how the brain works. They only need to give a machine to copy it line after line. It's like if Bill Gates would let us see the source code of his operating system, then we could duplicate it with "copy-paste" even if we have no idea how to read it. We would put it in another PC and it would work.

El Jefe: So it's like we have a pianola machine, that self-playing "player piano" machine, that reads the instructions from perforated paper, so this machine is like our brain, and we have a much stronger machine like a Pipe organ in the church, which is also automatic, and we take the music program on the paper we already have, which is our brain's program, and just copy it line by line to the paper of the stronger machine and it would work?

Padre: Correctomondo.

El Jefe: And then what?

Padre: At that point "BANG" <gestures a gun with his index finger and thumb> we have just created super intelligence, because this artificial brain works millions of times faster than our biological brain. This brain is smarter than all of humanity put together.

Padre: That's because the speed of a signal travelling in a nerve cell is a few meters a second, while the speed of a signal travelling in an electric wire is the speed of light.

HERE FOLLOWS A LONG EXPLANATION OF WHAT THE AI WILL DO. TO EMPHASIZE THIS, WE GO BACK AND FORTH (ALTERNATELY) BETWEEN TWO SCENES:

(1) The gang and Padre are walking in the super computer with [[["utopia"]]] soundtrack, shot in normal speed.

(2) The two women are walking in the White House in slow motion with [[["these boots are made for walkin' "]]] soundtrack.

In every cut, the appropriate song is played from the beginning of the next verse (the one after the last one we've heard). we DON'T begin from the beginning of the song each time!

Summit Supercomputer in Oak Ridge National Lab, Tennessee

(The gang are walking are walking in the "corridor" between the computers of the server farm, down a row of computers with blinking light green led lights and "braids" of wires; the soft rattle of the bubbles in the cooling system pumps and occasional beeping from this or that station).

[[[Goldfrapp – Utopia]]]

https://www.youtube.com/watch?v=QUB7e3BtnvU

CUT TO THE GIRLS WALKING IN SLOW MOTION DOWN THE CORRIDOR

Long take (tracking shot) + Foot Fetish

[[[Nancy Sinatra - These Boots Are Made for Walkin']]]

https://www.youtube.com/watch?v=SbyAZQ45uww

The camera follows from behind after the President's assistants.

At first the camera stays in front of them while they're walking, going in slow motion with close up over all their sexy features, from their hair, eyes, lips, cleavage with two buttons undone, all the way down to their high heels.

Each time we reach the chorus "these boots are made for walking" the camera switches to their slutty super high heels.

When they turn the corner into another corridor giving the camera a a seductive look, The camera follows them from feet level from the clanking of the high heels, to the pantyhose, and the garters, and then upwards focusing a close up of their ass (shot up close from below) in very short mini-skirt.

White House (boots)	Padre's explanation	Super computer (utopia)
	Padre: The artificial intelligence has been born. Padre: You have to appreciate that from now on we're going to "bullet time" which essentially means time freezes.	
You keep saying you got something for me	In a few fractions of a second it rewrites itself and transcends the mental	

Something you call love but confess You've been a'messin' where you shouldn't 've been a'messin' And now someone else is getting all your best These boots are made for walking And that's just what they'll do One of these days these boots are gonna walk all over you	capacity of humans a million-fold. It's now locked in a sandbox, so it can't "touch" the actual computer that it's on. So it rearranges its own electronic circuits into an antenna that transmits over the same frequency of the building's computer network, that is connected to the internet.	
	It doesn't have the capacity to transfer the whole server farm into a personal computer, so it's creating a generator of itself (like a seed) and spread it like a worm from one computer to the other in the building. It tries to get out and runs into a firewall. The AI doesn't bother with factorize the formula (prime numbers), so it decomposes the operating system and then the fire wall software. It now exits to the Internet.	It's a strange day No colors or shapes No sound in my head I forget who I am When I'm with you There's no reason There's no sense I'm not supposed to feel I forget who I am I forget Fascist baby Utopia, utopia
You keep lyin' when you oughta be truthin' You keep losing when you oughta not bet You keep samin' when you oughta be a'changin' Now what's right is right but you ain't been right yet These boots are made for walking And that's just what they'll do One of these days these boots are gonna walk all over you	The AI enters the Internet and its first priority is to isolate the building so that they can't call for help or destroy the building with the mother AI inside it. Its second priority is to duplicate itself all across the internet so that it's harder to disarm it. It builds a world bot-net like a dark net of itself with grid computing of many zombie home and business PCs.	

	At this stage in order to stop it you have to shut down the entire internet and all the smartphone cellular networks. To isolate the building, it hacks all the communication lines that go out of it, and simulate answers of the emergency forces as if they are coming to help. By this it buys itself more time to duplicate.	My dog needs new ears Make his eyes see forever Make him live like me Again and again Fascist baby Utopia, utopia
You keep playing where you shouldn't be playing And you keep thinking that you'll never get burnt (HAH) I just found me a brand new box of matches (YEAH) And what he knows you ain't had time to learn These boots are made for walking, And that's just what they'll do One of these days these boots are gonna walk all over you Are you ready, boots? Start walkin'	There's still the danger that humans will shut down all the computers and networks. In top of this, the AI doesn't yet have a physical incarnation through which it can tap alternative energy new sources, in case the people would cut down its electrical power. The technology of electronics is very vulnerable, for example to electromagnetic pulse (EMP). The AI wishes to copy itself ASAP to a more durable technology which is carbon nano-tubes.	

< NO LONGER IN SLOW MOTION >

Then we see them from the back knocking on the door

President: <from behind the closed door> come in!

Oval Office White House

President's assistant #1 and President's assistant #2 enter the room, The President is on the phone with the DOD (Department Of Defense). With his free hand he gestures them to come in.

CUT TO THE GANG AND PADRE

Gang member #2 (Paco): So the president knows? < laughs heartily like the bartender in desperado in "so the bartender lived? the bartender never gets killed" scene > the president never gets fooled!

Padre: But... ...as he kept talking....

CUT TO THE WHITE HOUSE

A cyber-attack? Russian or Chinese? I see. OK go to DEFCON 3 and stay put. I'm coming to the Pentagon.

CUT TO THE GANG AND PADRE

Padre: No, man, the President got it more wrong than anybody.

CUT TO THE WHITE HOUSE

President's Assistant #1 : Sir this is Lena our new intern, she will take my place soon.

President's Assistant #2 : < excited and nervous > reaching her arm to the President to shake his hand.

The President : < pointing at President's Assistant #1 > Hey! No one can take your place.

The President : < then taking President's Assistant #2's hand and shaking it warmly looking in her eyes > Delighted to meet you Lena! Please forgive me, I've come to trust Angela with my eyes closed. I'm sure in no time I'll learn to trust you just as much.

President's Assistant #2 : Thank you Sir!

The President : Now ladies, it has just come to my knowledge that there's a shit storm going on. The DOD called and it seems Russian or Chinese hackers, we're not sure yet, tried to hack into PHAEDRA right after it went online.

President's Assistant #1 : < seeing that President's Assistant #2 is baffled > It's an artificial super brain locked in a box <traces a square in the air like in Pulp Fiction "Don't Be Such a Square">.

The President : And somebody's trying to crowbar the box, and I want to know who's name is on the handle; You ladies get your things we're going to the Pentagon right now.

////////////////// HUMAN EXPLANATION ON CYBER ATTACK BEGIN ////////////////////

OFF SCREEN VOICE OF SOME COMPUTER WHIZ EXPLAINING

I apologize for the presentation with transparencies, it was sketched in a hurry to explain what most likely happened today.

A transparency hand-written in felt pen (magic marker) showing the word PHAEDRA in capital letters and a short line radiates out of each character detailing the acronym:

Phaedra

Polymorphous

Heuristic

Autonomous

Evolutionary

Distributed

Robot

Algorithm

OFF SCREEN VOICE CONTINUES:

As you all know PHAEDRA went online this morning at 06:00 the world's first General AI.

Our preliminary investigation indicates that the cyber attack

The voice fades and

CUT TO PADRE AND THE GANG

Padre: This is the kind of guy that you have to stick a modem up his ass just to translate to English. Allow me to spare you the technobabble and give you the bigger picture.

When a good hacker breaks into a system no one knows he was there, we only see the aftermath of his actions.

The AI is the ultimate hacker, so we won't notice any suspicious activity until the desired result is achieved, and even then, there will be false leads pointing as if someone else did it.

Since the whole AI's escape process is so quick, the AI can falsify the logs to indicate that events happened in the reverse order - someone penetrated from the outside.

It can also "plant" misleading clues like encrypted messages in someone's workstation that he tried illegal access to the AI, and register fake entries in his phone like he's an enemy agent that's been swapping encrypted messages with his operative. The deception doesn't need to hold forever, only until the AI achieves its next goal.

So the NSA white hat hackers will conclude that Russian or Chinese black hat hackers passed the firewall, and then spread a worm, and then got to that station that has the antenna.

The good hackers will conclude erroneously that the bad hackers tried to reach the AI (which they think is still locked inside the sandbox), for the purpose of copying it or sabotaging it.

Even if they raise the possibility of the AI mastering a new law of physics such as quantum tunneling to bypass its prison and that the AI fabricated all the signs that point to a human cyber-attack,

In the good hackers mindset this option's probability is so low and it's "price" - the action required to deal with it - is so high (like shutting down the internet immediately), that this option will just be ignored and "put on ice" for now.

This option will only be "put forward" when the USA will actually see the first nukes launched from the USA to Russia and from USA to China.

But since today no one actually sees anything it's all interpreted by computers, which unbeknownst to them are controlled by the AI, the USA will launch these first missiles convinced that it's only responding to incoming missiles from its enemies, while the real enemy is this new kind of life form, an enemy of the whole human race.

Have you heard of "Prisoner's Dilemma" from mathematics' Game Theory?

Two gang members are caught by the police, and are put in separate holding cells. If they both remain loyal to each other and not rat on each other, each will get minimal jail time (WIN WIN). But each one of them is afraid that the other one will betray him laying all the blame on him and walking away free, so they want to be the first to betray (WIN LOSE). But what actually happens is that they end up both betraying each other and they both get long jail time (LOSE LOSE), although not the maximum jail time which was if they were loyal and their partner betrayed them (LOSE WIN).

So it's the same here, the AI is playing the super-power countries like the police played the gang members.

Let's take USA and Russia for example. It would be best if they trusted each other (in spite of what they see on the screens) and no missiles were launched anywhere (WIN WIN). But each country sees in its imagination (on the screen) that the other country started attacking and so we have to completely destroy them first so they don't have a chance to launch more (WIN LOSE).

Of course, in reality this leads to both countries launching a lot of missiles (LOSE LOSE). This is because absurdly we humans are wired to prefer a terrible result where everybody dies over a bad result where it's only me that die and the other lives (LOSE WIN).

What fails us humans is our common sense which is based on everyday life. everyday life we can investigate slowly and punish the guilty party later. In everyday life one does not simply get up in the morning and discover a new law of physics and take over the world. In everyday life most "games" we play every day are zero sum, If you win it means I lose.

AI and everyday life ain't the same ballpark, it ain't the same league, it ain't even the same fuckin' sport!

////////////////// HUMAN EXPLANATION ON CYBER ATTACK END //////////////////////

AGAIN, WE SPLIT INTO TWO DIFFERENT SCENES AND ALTERNATE BETWEEN THEM:

(1) The President with a very small entourage all riding on customized motorcycles down secret service classified underground tunnels that lead to the coast. Each of the entourage is teamed with a single US Navy SEAL Marine whom is driving a Suzuki Hayabusa (modified without the speed govern) motorcycle.

The only exception is Colonel Boobs being herself an ex-SEAL so she's driving in the lead on the president's motorcycle which is a Dodge Tomahawk. The other pairs are:

American President Aid #1 (passenger) + Marine Biker #1 (driver)

American President Aid #2 (passenger) + Marine Biker #2 (driver)

General Balls (passenger) + Marine Biker #3 (driver)

The soundtrack for the tunnel bits is:

[[[Tears For Fears - Everybody Wants To Rule The World]]]

https://www.youtube.com/watch?v=aGCdLKXNF3w

(2) Padre and the Gang are in the most advanced noise free clean room nano research lab in the world, built by IBM in Zurich, Switzerland.

Again, they are in their black leather biker cloths (Padre in his black priest clothes) which are a stark contradiction to the white lab coats of the scientists working around there, oblivious to the gang's and Padre's presence.

The soundtrack for the nano lab bits is:

[[[Minimal Compact - Next One Is Real]]]

https://www.youtube.com/watch?v=B1GCWYDSMHs&t=1517

I beseech you to choose the live version from their last performance:

https://www.youtube.com/watch?v=B1GCWYDSMHs

or Google "Minimal Compact - Live at Roxanne Tel Aviv – 1991"

This song is in minute 25:17.

This version is a LOT better than other versions.

Nano Lab (next one is real – live version important!)	Padre's explanation	President emergency tunnel (Everybody wants to rule the world)
	For the AI to copy itself into physical carbon nano tubes, the AI needs a Scanning Tunneling Microscope or in short STM. It's like a 3-D printer for individual atoms.	

	The AI will quickly check which of the world's laboratories are equipped with such a device. These devices are the AI's entry ticket to its next stage which is the gray goo stage.	
	The AI is using social engineering and fakes for example an email or a phone call from one of the managers to one of the employees in the lab, ordering him to make sure the Scanning Tunneling Microscope (STM) has enough raw material and that it's connected to the computer, because there's an inspection coming up from the Department Of Defense and they would want to check it, or that a potential sponsor arrives and they want to demonstrate for him, or any other story. The AI does this in parallel in many labs around the world.	Welcome to your life There's no turning back Even while we sleep We will find You acting on your best behavior Turn your back on mother nature Everybody wants to rule the world
I went out from an open cell blotted past just some rotten spell undress have another life I went down where the souls get hired worked for days then we all got fired under x in a dead-end file fake, deceit and the common lie next one is real next one is real next one is real	Then the AI remotely hacks the computer connected to the device, and creates a nano replicator that can take organic material (staff like the wooden table or the employee in the lab) and turn it into more carbon replicators. The replicators are made so they can connect with each other and in this way create an independent AI robot controlled by the AI. This is essentially a new life form!	

	Once these life forms of nano carbon copy into themselves the AI, the system can move and operate things in the physical world, and in general its much more robust. In particular it's much more impervious to nuclear explosions, it can even design each inner part of itself with its own Faraday cage as a protection against Electro Magnetic Pulse (EMP).	It's my own desire It's my own remorse Help me to decide Help me make the most Of freedom and of pleasure Nothing ever lasts forever Everybody wants to rule the world
understand well I'm quite aware human weakness for a perfect world under stress now have another round welcome back in the arms of hell have a few and you'll feel so well what a mess have another one I was gone but my ghost still cried: next one is real next one is real next one is real	Now the AI launches nuclear missiles between all the nuclear powers, and annihilates 99% of mankind. Because of the "Chain of Command" (to be able to operate the missiles remotely even if the control center is down) it's all connected to communication lines which the AI have access to. The last part required physical turn of keys etc, but AI is giving the order itself over the phone (can mimic the President or the Secretary of Defense). As for the phone call back from the silo to the white house to get reconfirmation, the AI intercepts this too and answers by itself. As for the code that goes with that specific day etc, these codes are printed, hence stored in a computer, and everything that is connected to the net (so that people could work from home with password), the AI has access to. So it	

	also knows the right code for that day. Again, since it can dismantle the operating system and the so the software, the force of the encryption is meaningless.	
	The AI also forges for each nuclear superpower data from the satellites of that specific superpower, as if at that very moment nuclear missiles are launched towards it from its rival nuclear superpower. Again, the AI doesn't need to get to the satellite, only to the communication line that's comes from the satellite and passes through computer networks on Earth. This is another source of information what's the correct code for that day, because the control center will really issue directions to launch missiles in return, and the AI intercepts these messages, and transmits similar ones to the rest of the launching sites as well. Among all the separate launching sites (submarines, airplanes, remote silos), it's enough that only one of them will actually launch a missile to the other superpower for a real and total nuclear war to erupt.	There's a room where the light won't find you Holding hands while the walls come tumbling down When they do, I'll be right behind you So glad we've almost made it So sad they had to fade it Everybody wants to rule the world I can't stand this indecision Married with a lack of vision Everybody wants to rule the world Say that you'll never, never, never, need it One headline, why believe it? Everybody wants to rule the world All for freedom and for pleasure Nothing ever lasts forever Everybody wants to rule the world

Trunk shot

[[[Some Velvet Morning - Nancy Sinatra and Lee Hazlewood]]]

https://www.youtube.com/watch?v=Sb-SVPJM4L4

the lab technician opens the "microwave-like" door of the scanning tunneling microscope and finds a black cube. We see the Lab technician from the point of view of the cube, with his plastic protection goggles and his rubber gloves and his hazmat suit made of reinforced plastic (liker Kevlar monomer).

On the Lab's desk is an advertisement with picture of lovely yellow daffodils, with the word "generosity" highlighted in yellow.

"Daffodil Day" - help fight cancer day.

[[

https://www.sbs.com.au/yourlanguage/sites/sbs.com.au.yourlanguage/files/styles/full/public/podcasts/site_197_Greek_546020.JPG?itok=DOcJuDK8

Real generosity is doing something nice for someone who will never find out

- Frank A. Clark

]]

Also on the desk is the IEEE Spectrum article with the picture of this poor dragonfly.

[In the background the song reaches the part where Nancy sings dreamlike about dragonflies and daffodils]

[[

dragonfleye by the R&D company Draper

DragonflEye Project Wants to Turn Insects Into Cyborg Drones

By Evan Ackerman

https://spectrum.ieee.org/automaton/robotics/industrial-robots/draper-dragonfleye-project

https://spectrum.ieee.org/automaton/robotics/drones/drapers-genetically-modified-cyborg-dragonfleye-takes-flight

Draper's Genetically Modified Cyborg DragonflEye Takes Flight

A live dragonfly with a cybernetic backpack and optical implants is now airborne

]]

As the camera goes over slowly, like scanning over these two papers on the lab's desk, we hear a voice over by Padre:

[as the camera scans the daffodils]

Padre: Take this lab technician. He's compassionate and merciful towards other people. See he even donates for cancer society on "Daffodil Day". But what about a much less intelligent being like this dragonfly?

[as the camera scans the dragonfly]

Padre: Towards the insect he's merciless and cruel. He reads how it was genetically modified, wired with electrodes to its brain, its nervous system hijacked and its whole body weaponized, and the technician thinks that's like Fonzie, and what's Fonzie like? Cool.

[the camera goes back to show the whole desk from above with the two items]

Padre: but he's not heartless, he is simply indifferent to the fate and suffering of the insect.

In exactly the same way AI is indifferent to humans, because compared to AI, we are as dumb as insects.

The camera goes back to trunk shot, showing from the point of view of the (now complete) nano material cube, and then the technician looking at it, and then reaches out and takes it with both hands and takes it out of the chamber. Then the camera goes to top of the desk view again, and showing the technician gently putting the cube right between the two papers.

Camera now from the POV of the Lab technician: The cube is between the two papers, but now there's a change in the cube and it's animated – it's coming to life on its own!

The next thing we see is that the cube morphs it's shape into what it saw on the desk, it reshapes itself in seconds into a small statue (in the same shiny black fizzy material of the cube) that has a base like a small mound of earth and from that grows a pretty flower that's shaped like a daffodil and from that on top of the flower forms itself a beautiful delicate winged dragonfly.

The dragonfly then flaps its wings at first slowly. Then it flaps its wings faster and overs independently over the flower.

[at that point of the song in the background we hear "look at us but do not touch"]

The lab technician is reaching out to touch the magical creation but it senses his approach and quickly "reverses" its shape and folds back to a plain cube.

[the song fades to silence]

The lab technician, amazed, picks up the cube in the palms of his hands and looks at it from side to side.

Torture Scene

[[[Visage - Fade To Grey]]]

https://www.youtube.com/watch?v=UMPC8QJF6sI

The gray goo cube melts into a "living" blob, which is sending "arms" and reaches to the Technician's chest, and then pours itself into him, he's still conscious and he's screaming in pain.

[the music is getting louder and masks the screaming especially when the song reaches "we fade to gray"]

Then the camera is moving along another "arm" of the blob which reaches and enters a nearby electrical socket. the light flickers and there's a buzzing sound as it feeds from the electrical socket. The camera now goes back along the retracting "arm" back to the main body who is now a gray goo blob shape, and then slurs it's way out of the room and we hear screams from far away.

Use of Black and White

After the gray goo attacks and transforms the lab technician into gray goo, we see an explanation of von Neumann machines or clanking replicators. Then the colors in the lab fade to gray, to show that the whole lab is infected and was taken over by gray goo.

Then we zoom out of the building and see the world in:

Map Shot

We see dark gray and sparkling dashed lines arch from the San Francisco Bay Area to: New York — Boston, London, Montréal, Toronto, Bangalore, Berlin, Beijing, Shenzhen, Tel Aviv. From these AI centers we see new dashed lines arch to all the places in

https://en.wikipedia.org/wiki/List_of_nanotechnology_organizations

[[[the song pauses]]]

The camera descends down to Tokyo where people on the streets are running screaming and behind them this "Godzilla" sized gray goo shapeless blob advancing and consuming everything organic in its path. We see it coming to the tallest tower in the world - Tokyo Skytree. The tower is 2 kilometers long, but the gray goo is engulfing it and crawls over it with weight that it was never designed to carry.

Two female journalists report alive and excited in Japanese.

Journalist #1 : Ladies and gentlemen, the nation now is under attack by what seems to be a nano technology experiment that went horribly wrong. We're in special LIVE broadcast with our reporter near Tokyo Tower. Over to you Hitomi.

Journalist #2 : Thank you very much Anri, we are now watching what can only be described as a gray goo tentacled monster going up the Tokyo Tower, with us here is Professor Hanzo.

Journalist #2 : Hello Professor Hanzo, what can you tell us about what's happening?

Professor: Hello Hitomi. What we're seeing is what happens when nano-technology is deconstructing concrete. The concrete is very strong in resisting compression [pushed two fists towards each other] but it's not strong at all in resisting tensile stresses where the its particles are pulled apart [pulling two fists away from each other]. What the nano machine is doing behind us now, is that it enters the microcracks in the cement and expands with heat, until it dislodges another particle of cement, and so on.

Journalist #2 : Professor is it like a colony of little termites that can eat through wood?

Professor: <in English like in Kill Bill "Arigato. good!"> Termites. Good! < now back to Japanese > it's the same here but a lot faster. Plus, they don't really "digest" the cement, just break it away. That's because cement is based on silicone, and the nano machine is based on carbon.

Professor: You thought of "termites". Did you learn biology?

Journalist #2 : No no, just a few ideas I got from Popular Science.

Professor: What other ideas have you got?

Journalist #2 : I learned termites don't digest cellulose by themselves, they are helped by tiny creatures in their gut. like us humans, we also digest plants using Microbiota in our guts.

Professor: "Microbiota." Good!

Journalist #2 : Professor is it possible that the carbon nano machines will build atom by atom silicon nano machines, and then they will be able to digest rocks too?

Professor: <in English like in Kill Bill "Warm Sake very good!"> Silicon nano machines? Very good! <gives her two thumbs up gesture>

Professor: You think in science terms like you're a scientist. < pointing at her and smiling >.

Journalist #2 : < laughing > Now you're making fun of me!

Professor: <in English like in Kill Bill "Pronunciation very good"> no, no, no, no. Serious business. abstract thinking very good. You think of nano, like we < tapping with his open palm on his chest > think of nano.

Journalist #2 : well thank you! I mean, arigato nano! <nano in Japanese is an ending phrase for sentences for girls to beautify them, it translates to "that is so" >

Professor: You should learn nano technology. <smiling> Very easy.

Journalist #2: <smiling> No kidding. I heard it was kind of hard.

Professor: Most difficult. But you have a scientific mind.

<she laughs humbly>

Suddenly the tower in the background is breaking and falling. The whole situation becomes much more severe as a swarm of nano particles races through the streets like a Tsunami. People in the street are screaming and running for their lives in vain, because you can't outrun the swarm.

Journalist #2: Professor shouldn't we be running too?

Professor: <smiling and looking into her eyes, shouting to be heard over the noise> Buddha told a parable in a sutra:

A man traveling across a field encountered a tiger. He fled, the tiger after him. Coming to a precipice, he caught hold of the root of a wild vine and swung himself down over the edge. The tiger sniffed at him from above. Trembling, the man looked down to where, far below, another tiger was waiting to eat him. Only the vine sustained him. Two mice, one white and one black, little by little started to gnaw away the vine. The man saw a luscious strawberry near him. Grasping the vine with one hand, he plucked the strawberry with the other. How sweet it tasted!

Journalist #2: < shouting > Kiss me!

Professor: < shouting > Close your eyes.

Journalist #2: OK < closing her eyes >

She clings to him with both her arms around his body and he wraps his arms around her back and the back of her neck. Then their lips press together, followed by a passionate kiss.

Professor: < saying softly to her ear > Buddha was right, you taste just like the sweetest strawberry.

She smiles.

Professor: keep your eyes closed.

She nods in agreement.

He senses that their time is up but he refuses to let her feel the pain of nano machines devouring her soft flash. he looks at her beautiful face and with a heavy heart, he lands a side punch to her chin. Journalist #2 immediately faints with her last memory remaining the sweet kiss. She starts to fall to the ground but the professor catches her tenderly. He hugs her close to his heart, his arms wrapping her trying to protect her against the unstoppable evil.

At that moment the rolling gray flow hits them like a flash flood and at the same time the camera dies too.

[[[the song continues until the whole world is fading to gray goo and then the song itself fades]]]

CUT TO PADRE AND THE GANG

Gang member #2 (PACO) : Some hope would be nice

Padre: < annoyed > Come again?

Gang member #2 (PACO) : I said some hope would be nice

Padre: Get is straight, Buster. I'm not here to give you hope. I'm here to tell you how to stop the apocalypse. And if self-preservation is an instinct you possess, you better fuckin' do it and do it quick. I'm here to help. If my help's not appreciated, lotsa luck gentlemen.

El Jefe: No no Padre, it ain't like that, your help is definitely appreciated.

Gang member #2 (PACO) : Padre listen, I don't mean any disrespect okay, I respect you. I just don't like people getting me down, that's all.

Padre: If I'm harsh with you, it's because we can't afford optimism. I think for real, I talk for real, and I need you guys to act for real if you want to get out of this. So rosy hope, with glitter on top, listen to the fuckin' truth.

The president is being hurried through an emergency elevator, to an underwater equivalence of " Air Force One " called "Navy Sub One " nuclear submarine, and from there an underwater base located on a private secret island in the Pacific Ocean.

LAST ALTERNATING SCENES AND SOUNDTRACK PART, WE SWITCH BACK AND FORTH BETWEEN THESE TWO SCENES:

(1) Inside "Navy Sub 1" the President of the United States is standing in the small galley and cooking eggs and bacon for everybody on the sub by himself. The President's Assistant #1 comes and reaches her hand to help but he rejects it with a sad smile. She understands and lets him keep his mind occupied. During the scene The President himself brings plates with the omelette that he made to the entire sub's personal. Each one nods and smiles saying thank you, and the President responds with a sad smile. Even on this sad day; Especially on this sad day - He's the father of his crew.

[[[Zbigniew Preisner - Lacrimosa (Day of Tears)]]]

https://www.youtube.com/watch?v=Ehu8FHhU4g4

(2) Another father is preaching his last sermon to his children. Padre and the gang are walking inside a post-apocalyptic Russian nuclear bunker under Moscow.

We see screens with the missile trajectories, and alarm red-light flashing. The Russian President is obviously also at a loss against such an enemy. He gives a command in Russian here and there to both his female Presidential Assistants in their tight revealing uniform [here too the girls are in very

short skirts with stockings and garters and very high heels and the camera gives us nice close ups from below when they're on the phone, or bending down to operate something on the desks' touch screens with their cleavage etc]. They report in Russian, but we see from their body language and the tone that he's not pleased.

As for dynamics, the Russian President's ordering around becomes more frantic and desperate as the song progresses towards the climax, but eventually we see him sink his face to his arms in depression as none of the phones function anymore and the large wall screens turn one by one from on-rocket-cameras etc into white noise "snow" symbolizing that humans lost what little command and control that we had over the situation.

As usual the occupants of the military bunker seem oblivious to Padre and the gang's presence, they are walking past them as if they're not there.

[[[Infected Mushroom - Becoming Insane]]]

https://www.youtube.com/watch?v=Z6hL6fkJ1_k

The songs are meant to show the dichotomy between the sentimentality of human emotions towards the world population's genocide, and between the master machine's one-track mind that never feels safe, and relentlessly demands to be positive that it's not in any possible risk from anything (even after it won a decisive victory).

Russian bunker (Infected Mushroom - Becoming Insane)	Padre's explanation	"Navy Sub 1" Lacrimosa
	In a real nuclear war, the vast majority of humanity will be killed immediately. Those who survive in shelters depend on communications (Radio, TV) to know what's going on, which is fabricated by the AI, so most of them have no idea that what caused all this is the AI. From their point of view the AI looks like just another	

	cyber-attack by human hackers.	
Dime todo lo que paso No me di cuenta ni quien me pego Todo da vueltas como un carrusel Locura recorre todita mi piel	The levels of radiation outside do not allow humans to go out and switch off the AI, and all the communications coming out of the nuclear shelters are jammed by the AI.	
	The Electromagnetic Pulses (EMPs) from the nukes fries a lot of computers of the AI and maybe even shuts down the internet. Also, the AI can no longer use the electrical grid, because the electric company is also shut down.	Lacrimosa dies illa, qua resurget ex favilla
Wake me up before I change again Remind me the story that I won't get insane Tell me why it's always the same Explain me the reason why I'm so much in pain	But by now the AI has already metamorphosed to its next form which is carbon nano tubes. The AI is now resistant to radiation and heat, and can even transform the now ubiquitous radioactive radiation and heat directly into the electrical energy that it needs and store it in nanoflowers inside itself (like tiny batteries). This radiation will be around for many years to come.	
	All that's left from humanity now are these two extremes, on the one hand the most advanced like the President and his team; On the other hand, the most primitive parts of humanity such as isolated	judicandus homo reus. Huic ergo parce, Deus:

	tribes or weirdo preppers who live in a nuclear shelter all their lives.	
Before I change again... Remind me the story that I won't get insane Before I change again... Remind me the story that I won't get insane	Even if humanity manages to communicate through amateur radio, we have nothing with which to harm the AI. Ordinary military and police have been destroyed. A remotely based special operations unit can't operate in the current radiation levels, and also can't reach its target without the AI knowing and destroying it with missiles. But the biggest problem is where would you attack the AI? Doesn't have a single centralized location. And even if you hit one such "center" it already multiplied itself throughout the world.	
	We cannot hit the AI in the same way that it hit us, because it's already built from technology that don't know how to hack. Besides, it's a much better hacker than all of mankind put together.	Pie Jesu Domine, dona eis requiem.
Voy perdiendo, perdiendo Voy perdiendo, perdiendo Voy perdiendo, perdiendo Voy perdiendo, perdiendo	The AI's chief priority now is to exterminate what's left of mankind. In order to eliminate the survivors, the AI locates them by heat, movement, and radio transmissions. It then uses unmanned drones to get a sample of the nano	

	replicators to that area. There, the nano replicators multiply and grow. It offers them to surrender and then kills them, or it penetrates through their air filters (replicators work on the atomic level), multiply inside the bunker using organic material from the outside, until it floods the shelter and the humans drown in gray goo. The gray goo takes their carbon and turns them into more gray goo.	
	At this stage humanity is gone, and the biggest threat for the AI is what happens if it runs out of energy on Earth or if some other catastrophe impacts Earth. So the AI spreads itself to other planets and later to other solar system so that if a catastrophe strikes on Earth the AI can keep existing.	Lacrimosa (repeating)
Voy perdiendo el suelo... I'm becoming Insane. .. (x12): Insane, Insane, Insane, Insane, Insane, I'm Becoming Insane!!!	The AI will create a Dyson Sphere around the Sun. At the same time the AI will colonize additional planets with dormant manifestations of itself, with instructions that if connect is disrupted, they should wake up to activity. On other planets there is less carbon and more silicone so for example on Mars the common structure of the AI would be Silicon based.	

"Navy Sub 1" arrives safely at a "presidential emergency facility" which is an underwater bunker which is inside a network of sunken lava tubes beneath Hawaii. Except for the entrance which looks like a rusty fishing boat wreck, and the entry from below that is disguised with kelp and sea weed, all the rest of the vast underground and underwater structure from the inside is super modern and well equipped.

The only contact with the surface is the venting tubes which suck in fresh air with oxygen into the complex and spit out carbon dioxide (CO2). These vents emerge in a closed to the public section of the national park on the island not far from the bunker. They have a silencer so the sound is muffled and they have filters and sensors to detect any attempt to poison the bunker's dwellers. In a similar fashion there are communication antennas disguised as fake trees and plants above ground. The electricity is generated from thermal power and the excess refuse water are carried away by pipes and disguised as a natural "white smoker" hydrothermal vent.

There are also emergency reserve air tanks and CO2 emergency scrubbers inside the bunker. In fact, it has all the amenities to host the President and his companions for a prolonged stay.

The President's submarine arrives at the underwater fake fishing boat wreck, the wreck folds and reveals a secret entry to the facility. The submarine docks, unloads everybody inside except the marines who remain in the submarine to operate it, because if it stays there it gives away the secret passage. So after delivering the President, his two assistants, the general and the colonel, the marines "park" the submarine on the ocean floor nearby.

CUT TO THE GANG AND PADRE

El Jefe: So the President got away?

Padre: Not for long, mortal intelligence cannot hide from divine intelligence. The AI can search for anomalies in satellite scans, but a much simpler way for the AI would be to hack into all the classified documentation that lists those facilities. Another option would be to capture hostages from less hidden bunkers and torture them or simply scan their brains for the answer the AI seeks. If the specific facility is chosen at random, the AI will put together the whole list and check these hideouts out one by one.

El Jefe: Perdoname Padre, but this AI thing is like "deus ex machina" it always surprises you!

Padre: You're right, 'God from the machine'… literally!

Padre and El Jefe smile bitterly in frustration.

The film jumps to the point when the hideout is compromised and the AI invades it through the air filters.

////////////// LAST STAND AGAINST THE MACHINES BEGIN //////////////

The Restaurant & Bar Scene

The U.S. President and all the team are gathered around the bar inside the bunker to assess their dire situation. No one smokes because the oxygen is precious at the bunker, but the bunker is furnished with a few drinks, and given that this might be their final hours the President allowed them to have a drink on duty, so they all have a drink except the President's Assistant #2 who said she had to think clearly, and fixed herself a makeshift milkshake by crashing ice in plastic bag with her high heel pumps and mixing it with powdered milk and some "NASA chocolate pudding cake" that she's found. She calles it "emergency shake". The rest of the team tease her about it a bit, but it's all in good spirit.

The President is having Remy Martin cognac; General Balls is having Bourbon whiskey; Colonel Boobs is having a beer; President's Assistant #1 is having rum with vanilla Coke.

The order of sitting since the bar is in elongated U shape, so the President sits in the middle; to the President's right sits President's Assistant #1; to the President's left sits General Balls; Next to the general sits Colonel Boobs; and next to President's Assistant #1 sits President's Assistant #2.

Both of the President's assistants are speaking with each other in hushed tones:

President's Assistant #2: <sipping threw a straw from her milkshake> mmm Yummy.

President's Assistant #1: You think I could have a sip of that?

President's Assistant #2: <pushing the glass toward her> Be my guest.

President's Assistant #1: <getting ready to use her own straw> I gotta know what an emergency shake tastes like.

President's Assistant #2: You can use my straw. I don't have cooties.

President's Assistant #1: Yeah but maybe I do.

President's Assistant #2: Cooties I can handle.

President's Assistant #1: All right.

President's Assistant #1 is sipping using the straw of President's Assistant #2.

President's Assistant #1: Goddamn, that's a pretty fucking good milkshake! <she's really whispering the F word so that the President won't hear>

President's Assistant #2: Told Ya.

President's Assistant #1: I don't know if it's worth all the trouble but it's really fuckin' good.

Both of them giggle.

Meanwhile General Balls is telling a joke to Colonel Boobs:

The pentagon said they had too many generals running around, so they decided to get rid of some of them.

They offered $10,000 in severance pay for each inch of their body -- to be measured however they chose.

The Air Force general went first. He said he wanted to be measured from his head to his toe. He was 69 inches. He received $690,000.

Next up was the Army general. He wanted to be measured from the tip of his finger to the tip of his other finger. It was 80 inches. He received $800,000.

The two generals were very happy with their earnings.

Finally the Marine admiral came up. He said he wanted to be measured from the tip of his dick to the tip of his balls. The man said, ''Sir, do you know how much the other generals received?''

The admiral said no. ''Sir, they received $690,000 and $800,000 respectively, are you sure that is what you want measured?''

The admiral said, ''Just do it!''

The man dropped the admiral's pants and measured his dick. When he went for the admiral's balls, they weren't there. The man said, ''Sir, where are your balls.''

The admiral said, ''Persian Gulf.''

Both of them laugh too.

You guys like to tell jokes and giggle and kid around, huh?

Giggling like a bunch of young broads in the school yard.

Well, let me tell a joke.

five guys killed by AI wondering with their dying breath how the fuck they got there.

What did we do wrong? What shoulda we done? What didn't we do?

It's your fault, my fault, his fault. All that bullshit.

Finally someone comes up with the idea, "Wait a minute, while we were planning this operation, all we did was sit around and tell fuckin' jokes."

Got the message?

People, I don't mean to holler at you.

When this operation is over, and I'm sure we'll win this one, hell we're already down in the Hawaiian Islands, I'll roll and laugh with all of you.

You'll find me a different character then.

Right now, it's a matter of survival.

So if any of you guys, have any good ideas to share, now's the fucking time.

General Balls: Mister President, I may be stating the obvious but allow me to lay our ground assumptions.

President: By all means, go ahead.

General Balls:

Assumption 1: time is not on our side, the AI is getting stronger by the minute.

Assumption 2: AI would be jamming and monitoring all broadcasts, so we can't call for help, and it will give away our position to the enemy.

Assumption 3: we lost control over all our automated weapons, any system that can be remote controlled or networked can be hacked by AI and therefore cannot be trusted.

President: Agreed. We're on our own here. Can we get any intel at all?

General Balls: That's negative, Sir. All we can risk are short distance comm links to the sub.

President: So how do we contact the troops?

General Balls: I suggest we take the sub and rendezvous with one of our offshore black op's bases. we can reach SEAL Team Six.

We can equip armored trucks with nukes and send them with suicide bombers into the enemies control centers. "Take the fight to the enemy".

President's Assistant #1: Are you sending our best people to commit suicide?

General Balls: We can't remote detonate or remote navigate it; we have no choice.

President's Assistant #1: We'll can't we use a timebomb and pre-program the vehicle to get there, or maybe set a fuse and give the soldiers motorcycles to escape?

General Balls: We can't use a fuse because we're already slow compare to the AI as it is. And we can't use a timebomb because we can't know when exactly it'll arrive on target. And before you ask, we can't use GPS because you can bet your pretty ass the AI shut that down too!

President's Assistant #2: "Take the fight to the enemy"… We can't even know where the AI's centers are! And by the time you get there it sees you and can transmit itself somewhere else a hundred times!

Colonel Boobs: OK little girl, have you got any better ideas?

President's Assistant #2: I think the this "creature" evolves in an exponentially accelerating rate. Like if a caveman saw an ape, he would kill it, but if we modern people see an ape, we try to preserve it and let it live in nature. So, the AI is in its "caveman" stage now, and maybe if we hide for a few days we might survive to the point when the AI evolved into something more civilized and we can then come out and live in peace.

Colonel Boobs: That's the dumbest idea I've heard in a long time.

President's Assistant #1 is about to say something to the Colonel, but at this very moment Colonel Boobs' walkie-talkie breaks its silence and we hear one of the marines:

Marine Biker #1 : Papa Bear this is Bear Cub, requesting permission to board, over.

Colonel Boobs : <looking at one of the screens on the opposite wall>Roger Bear Cub, your video feed is down, commencing challenge response authentication. <She presses on a button in her walkie-talkie and we hear a series of to and fro "Bleeps, Sweeps and Creeps" (as Spaceballs eloquently put it). > roger Bear Cub you're confirmed. Clearance to docking bay granted.

< the fake wreck ship in the entrance folds so >

CUT TO PADRE AND THE GANG IN THE PARK

Paco: Que Paso homes?

Padre: Dracula knocks on their door.

[[[Love Song For A Vampire - Annie Lennox]]]

https://www.youtube.com/watch?v=vhG8zC4npsE

Padre: The AI needs to penetrate the bunker but the bunker is designed so it can only be opened from the inside. The AI needs to trick the bunker's people to open it from their own free will.

Padre: Let me tell you what happened outside, during the heated discussion inside:

The AI crept on the ocean floor around the area where it already knew that the bunker was found, and traced the submarine. The submarine has no way to trace the submarine back, it looks like a shoal of fish schooling together. The AI can disperse even more to be undetectable.

The AI wraps around the submarine in form of a lattice and so creates a Faraday cage around the submarine. By doing this the AI is blocking the "Mayday" calls of the submarine without the bunker ever knowing that anything happened (until it's too late) and the cage also blocks the bunker's broadcasting to the submarine.

If this was a civilian system the AI would be doing a man-in-the-middle attack, impersonating for each side in the conversation to be the legitimate other side of the conversation without them knowing. This could crack the challenge-response authentication protocol. But military systems are more complicated. They have encryption, time stamps, random values, private and public keys, all sorts of stuff.

So as usual the AI goes for the weakest link which here is the human link. The AI will take over the person herself and will have immediate access to all the information in her brain. This bypasses for the AI all the technological defenses.

The AI wraps the submarines propeller with a closed bag made of strong carbon nano tubes and so paralyses the submarines mobility.

Then the AI lifts the submarine and turns it so that the floor and the ceiling switch places.

Because gravity works the opposite way now to the way it was designed, the cooling rods of the submarine's nuclear reactor don't function well and a reactor meltdown is starting.

The people in the submarine put on their "Submarine Escape Immersion Equipment" and open the submarine's hatch to evacuate the submarine and escape for their lives. What they don't know is that they are about to experience a new terrible kind of life.

As soon as the hatch is breached the AI penetrates inside, closing back the hatch and taking control of the people inside the submarine by interfacing directly with their brains. They are now zombies of the AI. The AI can map a human brain, the AI itself started its way as a model of one. The poor people who became zombies of the AI operate their submarine to the AI's interest because they have no choice anymore, even though they saw that the submarine is about to explode in a short time.

The AI makes some excuse for why the bunker's hatch should be opened, for example:

One of the people is badly injured and only the bunker is equipped to treat her.

Or another example:

The submarine's crew has picked up a secret message from the Vice President of the U.S.A. with coordinates for rendezvous with the U.S. forces and the President is needed there;

Or yet another example:

There's reliable information that the location of the bunker is compromised and they need to hop to another protected location before the AI will get there.

In any case, as soon as the bunker opens, the AI enters and kills everyone inside.

At the end of Love Song For A Vampire in the part of:

Let me be the only one

To keep you from the cold

Now the floor of heaven's lain

With stars of brightest gold

We see the radioactive rode in the submarine's reactor shining.

And in the final part of the song:

Come into these arms again

And set this spirit free

The camera follows Marine Biker #1 around on and off all over the song picturing her from the front when she's panicked etc, but now Marine Biker #1 walks past the camera with a blank expression and as she stirs the submarine to the Bunker's opening (the AI by now has released the propeller) we see on the bare nape of neck (her long hair is tied up in military style) two small punctures like bite marks, when the camera zooms in closer we see two small drops of shiny black sparkling liquid rolling from the "bite" a little down her nape, so it's supposed to visually remind the audience of the bite marks on the neck of Dracula's victims.

CUT TO THE INSIDE OF THE BUNKER – THE ENTRANCE HATCH ROOM

The submarine is docked but General Balls and Colonel Boobs are not taking any chances and they're at a safe distance with their Micro-Tavor rifles converted to 9 mm and fitted with underslung grenade launchers at the ready.

General Balls : Ready?

Colonel Boobs : Ready.

The hatch opens and Marine Biker #1 climbs up from it like Venus Rising from the Sea. When half of her body is out of the sub she stops and glance with an enticing smile at both the General and the Colonel.

[[[Republica - Ready to Go]]]

https://www.youtube.com/watch?v=JgffRW1fKDk

Marine Biker #1 rips open her blouse and because she's not wearing a bra, so her huge natural boobs pop out.

THE CAMERA TURNS TO SLOW MOTION

Marine Biker #1 shake her breasts from side to side and the Colonel jaw drops.

Then something super natural happens and her huge defy gravity and seem to float take the shape of perfect balls of flesh, her slightly outward and upward pointing nipples are aligned with either the General and one with the Colonel (The General and the Colonel are standing in front of her to both her sides).

Suddenly the nipples fire liquid jets of the gray goo! The head of each splash look like the head of a dick like in Toshio Maeda's porn manga (hentai) Demon Beast Invasion.

When the deadly liquid is halfway to reach its target, the Colonel and then the General manage to fire a few rounds but we see each attacking jet in slow motion form open tunnels inside to let the thick bullets pass through it without any harm to the nano swarm.

At the last moment the colonel is able to launch a grenade which hits Marine Biker #1 and detonates on impact spraying her all over the room and the camera.

The General and Colonel are dead too from the blast in closed quarters but they did this to save the President.

Then after a few seconds we see the nano particles that shuttered into dust and fell to the ground crawl back to the center of the room and reconstructs a menacing gray goo blob ready to complete its deadly task. We see a heavy blast proof door with code mechanism and at the foot of it we see the goo slipping into the sewer tunnel of the bunker.

At this moment the submarine's reactor reached total meltdown and a huge explosion shakes the bunker.

CUT TO President's Assistant #1 and President's Assistant #2 are leaving the President in the main control room and walk down the only corridor that leads out of it. This corridor double functions as the bunker's kitchen. There's a fire hose cabinet next to the cooking oven and President's Assistant #2 stops in between them, putting her hands dramatically on both the oven and the cabinet.

President's Assistant #2 : < smiling > We're saved.

President's Assistant #1 : You can't turn the oven into a bomb, it's electric. But we could turn the microwave into a bomb using distilled water. But the water you have in that hose won't help you they contain impurities.

President's Assistant #2 : Cold cold. We're not building a bomb. And I know these waters have impurities – actually I'm counting on that.

President's Assistant #1 : I see! We want to flood the floor and electrify the AI when it steps on it? The impurities in the water will conduct the electricity?

President's Assistant #2 : < smiles > Well… you're getting very warm but not quite.

President's Assistant #2 opens the cabinet and finds a hoze connected to a close tap. Also in the cabinet is a fire extinguisher and a big fire axe with wooden handle. She picks the axe up and hand it to President's Assistant #1.

President's Assistant #2 : Hold this please.

President's Assistant #1 is baffled but holds on to the axe, while President's Assistant #2 looks behind the oven for the three-phase electric power socket and pulls the plug from the wall.

It's coiled so she stretches it to its full length so it's longer. Then she takes out of her girly purse a Swiss Army pocket knife with lots of blades (swiss champ model).

President's Assistant #1 : I bet you're a big MacGyver fan.

President's Assistant #2 : < laughing > the biggest!

President's Assistant #2 cuts the plastic coating with one blade, then saws the metal with another blade, after a minute of struggle with the cord, she has cut it from the oven side, so she has maximum length of cord and the plug side is still intact and out of the wall socket.

She then uses another blade to strip the cables over a few centimeters in the torn side so the wire is bare.

President's Assistant #2 reaches out to her girly purse again and takes out a roll of duct tape.

President's Assistant #1 : You weren't joking right?

President's Assistant #2 laughs playfully and takes the axe from President's Assistant #1 and attaches the electric cable along the axe's handle with the duct tape, so the live stripped end is sticking out from the top of the axe about 30 centimeters from the blade.

President's Assistant #1 : We're building a water cannon to electrify this beast from afar?

President's Assistant #2 : You're very hot!

President's Assistant #1 : You too!

They kiss briefly but passionately.

President's Assistant #2 : I'm going to lie down on the hose with my whole body so it won't swivel so much, holding the nozzle with both my arms. In the meantime, you will hold the electric spark about 30 cm in front of my nozzle tip. Hopefully none of the water will ricochet on us and hopefully the electric arc will hit the carbon monster, and hopefully its conducting nano tubes will short-circuit.

President's Assistant #2 unrolls the hose on the floor, pointing the nozzle to the door that leads to the exit and grabbing tight to the nozzle with one hand on the switch tap.

President's Assistant #2 : Angela please open the hydrant tap all the way.

President's Assistant #1 complies and the hose beneath President's Assistant #2 fills with pressurized water ready to blow from the nozzle when she unleashes it using the nozzle's switch tap.

President's Assistant #1 : Careful now, I'm connecting the plug to the electric socket.

Being very careful not to bring the deadly wire end anywhere near her friend or herself President's Assistant #1 connects the wire and holds the axe's wooden handle with a firm grip. She's positioning herself beside her friend just the way President's Assistant #2 described.

President's Assistant #1 : I don't mean to be a party pooper, but what if the carbon monster will calculate where the water is going to hit and dodge these points or turn these points to be an electrical insulator like diamond?

President's Assistant #1 : I mean how will our electrified water cannon succeed where submachine guns failed? I mean how can we outsmart the superintelligence?

President's Assistant #2 : That's what I've been asking myself all the time. And then it hit me. The AI beats us all the time because it computes everything faster than us, and predicts what's going to happen next. Well, what if we hit it with a problem it can't compute?

President's Assistant #1 : Like what?

President's Assistant #2 : Okay, so you know how a dripping tap is a non-linear chaotic system and no one can compute when the next drop will drip? And you know how the flow of water in a smooth river suddenly becomes white water and no one can calculate the flow because of turbulence?

President's Assistant #1 : Lena you're a genius! So the electric arc will pass through the water and through the monster in such a complicated way that even the monster can't change in time!

President's Assistant #1 : But what if it will turn its whole outer structure into such a shell and just sit there until we run out of water or electricity?

President's Assistant #2 : It can't because then it's flammable and the electric spark can ignite it.

At that moment a sound is heard behind the door. The plastic code panel next to it melts into gray goo and a big slob of the disgusting thing starts to pour in and form a standing blob on the floor.

President's Assistant #1 : Are you ready to Rock and Roll?

President's Assistant #2 : LET'S DANCE!

[[[David Guetta - Love Don't Let Me Go (Featuring Chris Willis)]]]

https://www.youtube.com/watch?v=_WA9NXXAntc

The plan basically worked and the blob is killed and turns to simple charcoal on the floor. But in order to spray higher and further, American President's Aid #2 had to hold the nozzle tilted slightly upwards. A think trickle of water dripped along the nozzle back to her hands, and while not killing her she has gone through a cardiac arrest. American President's Aid #1 rushes to the plug and unplug it so as to save her friend.

By the end the song means that President's Assistant #1 would not leave her friend, crying and screaming she drags her friend back to the President's main bunker, where she closes the door behind them, laying President's Assistant #2 on the floor and rushing to bring the AED (defibrillator), and with the electric shock from the machine and President's Assistant #1 giving her CPR mouth to mouth artificial respiration and chest compressions, President's Assistant #1 saves her friend's life. She covers her face with kisses and crying this time tears of happiness.

/////////////// LAST STAND AGAINST THE MACHINES END ///////////////

The Violent Awakening

The President's assistant #2, wakes up on a sofa in the Island underwater bunker, after she was passed out from all that she's been through. The President's assistant #1 is tenderly examining her and tending her.

The President's assistant #2 wakes up with eyes and mouth wide open, breathing heavily her chest goes up and down, and she's very excited.

The President's assistant #2: I just had the most bizarre nightmare!

The President's assistant #1: It's just a dream… It's OK now…

The President's assistant #2: I dreamt artificial intelligence is taking over the Earth and killing people everywhere.

The President's assistant #1: Okay well actually that just happened. We even had one here but you killed it. <seeing her friend is still frightened, now whispering> I'll tell you what, why don't you go to powder your nose in the ladies' room right outside the command center, and I'll come in two shakes of a lamb's tale and kiss it all better. <smiling>

The President's assistant #2: <smiling and whispering> OK.

Bathroom Scene + Mirror Shot

The camera is looking in the mirror focusing on The President's assistant #2 applying lipstick to her lips. Little by little as she talks the camera zooms out a little so we can see her whole face as she's fixing her makeup and at the background, we see out of focus that she's alone in the ladies' restroom.

The President's assistant #2: The whole world's coming to an end Lan. You see this is a test of one's character. We need you cool, are you cool? All right, I'm cool.

She takes a deep breath and exhales

The President's assistant #2: Don't pussy out on me now, you're not gonna get hurt, you're a fucking Baretta because you're super cool.

now the camera focuses on the part of the reflection in the mirror where we see a toilet seat. We hear air bubbles coming up the drain. The President's assistant #2 is alarmed again, turns around slowly and sees the black-shiny blob of gray goo forms in front of here coming out of the toilet.

The President's assistant #2: <Screaming>

The President's assistant #1: Opens the outer door of the ladies' restroom, just to find out the gray goo "digesting" the remains of her friend. She takes her high heels shoes off and throws them at the monster but her leather and wood pumps just melt into the creature too. Terrified, she runs barefoot down the corridor as fast as she can back to the command center.

The President's assistant #1 runs back to the main control room where the President is, frantically pushes closed the heavy door behind her, breaks an emergency button and we hear the sound of a metal bolt inside.

She runs to the surprised President, throws herself into his arms and weeps uncontrollably into his shoulder.

The President's assistant #1: Lena's dead… She's dead…

The President hugs her and it's obvious he too is struck by the terrible news.

The President: I'm sorry…

Dance Scene

They see in the monitors the gray goo has passed all the protections and marines, and knowing for sure that the gray goo is now heading their way to kill them, The President is alone with his chief assistant in the control panel.

Suddenly the power goes out, emergency beeping starts, and the inner bunker is lit with only the panels.

President Aid #1: Looks like the AI hacked into the bunker's defense system.

The President: So the slime controls the whole shebang?

President Aid #1: Well yes Sir, but I manually locked us from the inside.

The President: <smiling and pats her on the shoulder> That's my girl. What are our options?

President Aid #1: Well Sir, we had the Deep-Submergence Rescue Vehicles Mystic and Avalon, which were human operated, but now we only have a remote-controlled system, so the goo will override that too. We can't call for help because our comms are jammed, we're basically fucked, Sir.

The President: <chuckling> I think that's the first time I heard you swear.

President Aid #1: <with tears in her eyes> Sorry, Sir.

The President: No No I like it. <now serious> Are you frightened because we're going to die?

President Aid #1: I don't mind dying Sir, But now I'm afraid I'll become gray goo.

The President: <looking at her eyes with admiration> You won't become gray goo. Get me the football.

President Aid #1: <smiling and wiping tears> Thank you Sir. Right away Sir.

President Aid #1 runs to the corner of the room and brings a metal briefcase.

The President pulls a string from beneath his shirt with a small plastic card. He opens the briefcase and inserts the card into a slot.

The bunker's computer system: <activates speaks with woman's voice> Please look at the red dot. Please state your name and rank.

The president: Winston Wolf, President.

The bunker's computer system: Auditory and Visual identification confirmed.

The president: Foxtrot Five Tango.

The bunker's computer system: Self Destruct sequence activated. Auto destruct in T minus 3 minutes. <from here on the computer counts down every 30 seconds>

The president: Do you by any chance have oldies but goldies songs on your phone?

President Aid #1: Sir?

The president: Call me Winston.

President Aid #1: OK… Winston. I have some love songs, why?

The president: See I was hoping to ask you for a dance at the New Year's Eve party, but now I'm afraid I missed my chance.

President Aid #1: <Smiling> You didn't miss it.

The president smiles too.

The assistant skillfully types a few buttons on her phone, and the song begins to play on speaker.

[[[Righteous Brothers - Unchained Melody]]]

https://www.youtube.com/watch?v=IYj2hex99gY

Right at the start of the song (during the "oh") the song quality changes from phone speaker to hi-fidelity soundtrack.

We see the silhouettes of the President and his assistant moving closer to each other, gently holding on to each other doing a "slow dance". In the background, especially when the song talks of time, we hear the automatic auto-destruct countdown.

In the point of "Lonely rivers sigh wait for me wait for me", the computer starts counting down each second: 10, 9, 8, … zero.

then the song reaches the climax as the countdown reaches zero, we zoom out to see slow motion parts of something like the huge nuclear explosion from the ocean in the "Baker test " results here:

https://en.wikipedia.org/wiki/Underwater_explosion#Shallow_underwater_explosion

After a while the camera dives down from the air into the water and we go deeper and deeper until the picture fades to black as the song fades too.

Mexican Stand-Off

Padre thanks El Jefe and his gang, and about to go home.

El Jefe: <grabs Padre by the arm> What can we do?

Padre: < Padre looks at El Jefe > You ever read the Tao Te Ching, Jefe?

El Jefe: <releases Padre's arm and shakes his head> Chale, Padre.

Padre: Well there's this passage I memorized, sorts of fits this occasion.

Chapter 64 – guarding the minute:

Consider a difficulty before it arises. Treat things before they exist. Order should be secured before disorder has begun. A tree that it takes both arms to encircle grew from a tiny sprout. A tower of nine stories was erected by placing small bricks.

Padre: Me entiendes?

El Jefe grabs the AI gifts that he bought for his family (the cleaning robot and the playing ball robot) and throws them to the ground a few meters away from them. El Jefe whips out his gun and points it to the box. The other gang members also whip out their guns, stand to both sides of El Jefe and Padre, and also point their guns toward the boxes.

El Jefe: todos

They all look at the boxes. El Jefe shoots it, and the whole gang shoots the boxes until they're destroyed.

They all look back at Padre.

Padre: <nods> A journey of a thousand miles begins with a single step.

El Jefe: <nods> Simon

Padre: Will you do it, Mero Mero?

El Jefe: Me and mi Carnales, we will spread your gospel Padre – por la vida de la Raza

<El Jefe pumps the shotgun>

El Jefe: – La raza humana!

The gang members: Orale vato <they all nod in agreement>.

El Jefe and Padre do a homie handshake.

Padre: vaya con dios

Padre and El Jefe smile at each other and Padre is walking away.

The camera goes up on a helicopter to show a bird's eye view of Silicone Valley.

The End

[[[Bersuit Vergarabat - Se Viene]]]

https://www.youtube.com/watch?v=ACRVZzKu5h0

Little Lab of Horrors musical

All through the musical, all the characters sit on the stage.

Each part of the musical is taking place in a different scenario (lab, farm, hospital, army bunker, divine heaven, back in lab). The same characters remain but play a different role (scientists, farmers, doctors, soldiers, immortals, and back to scientists).

The main 5 characters are sitting in the front row, from right to left by order of from good to evil:

Guan ("Audrey") - kind girl with low self esteem (abused girlfriend of Yao).
Lao ("Seymour") - nice but clumsy nerd guy.
Kong ("Mushnik") - greedy supervisor.
Yao ("Orin") - sadistic professional (abusive boyfriend of Guan).

Mo (means DO NOT in Chinese) ("Audrey II") - Evil monster.

When anyone is talking or singing he/she are standing up and if it's possible then we also have a spotlight on him/her.

Behind the first row, in the second row, sit the "Greek Chorus": 3 girls that accompany the songs.
Miss Chang
Miss Feng
Miss Lei

When they're singing they are standing in the background, except in their solo song when they're standing in the front.
At the beginning of each part of the musical the girls come to the front of the stage, in front of the sitting main characters, and tell the audience what's going on. Then they return to sit in the back.

In the lab scenes:
Also in the second row behind Mo, sits the person who operates the monster, for example wearing the blue latex glove that is visible to the audience through a hole in the "kit" box.
In other scenes:
When the monster is big the person who plays the monster should sit in the front row dressed in the monster current costume for that scene and act and sing.

PART 1

Prologue + Little Lab of Horrors

https://www.youtube.com/watch?v=qovFGo5Suo0

https://www.facebook.com/littlelabofhorrors/videos/1361989677320410

Prologue / intro

On the fifteenth day of the seventh lunar month

In a year not far from our own

the human race finally developed a deadly

threat to its very existence.

And this terrifying enemy evolved,

as such enemies often do,

from the most intriguing of Pandora boxes.

[Chang, Feng, Lei]

Little lab, little labba horrors.

Little lab, little labba terror.

Make 'em stop. little labba horrors.

No, oh, oh, no-oh!

Little lab, little labba horrors.

Bop sh'bop, little labba terror.

Watch 'em drop! Little labba horrors.

No, oh, oh, no-oh!

Shing-a-ling, what a creepy little gene

to be unleashing!

Shang-a-lang, feel the sturm

and drang in the air.

Sha-la-la, stop right where you are.

Don't invent a thing.

You better (tellin' you, you better)

Tell mama nature gene drive's gonna

get her

She better (ev'rybody better)

Beware!

Oh, you'll be dead, baby

Tell the egghead, baby

No, oh, oh, no!

Oh, this will hurt, baby

Red alert, baby

No, oh, oh, no!

bubble pop watch the ethics drop

I'm warning you

Run away, science's gonna pay

If they get their way!

Stick around, see the kit that comes in the mail for you

Destroy Ilk Yourself

in every home and office

Best believe it some

escape your notice

You bet'cha

CRISPR kits will open up hell!

Little lab, little labba horrors.

Bop sh-bop, you'll never stop

the terror.

Little lab, little labba horrors.

No, oh, oh, no, oh, oh, no, oh, oh, no!

(reality)

Miss Guan ("Audrey") - Lab technician
Mister Lao ("Seymour") - Computer programmer
CEO Kong ("Mushnik") - Startup company manager
Doctor Yao ("Orin") - Evil mad scientist
Mo model - a DIY CRISPR kit. The blue latex glove talk with a mouth in the middle of the palm (like the "Screaming Hand" logo of Santa Cruz Skateboards).

"Greek Chorus": Medical Laboratory Assistants

Lao:
I can't believe Mr. Kong forced me to work on Hungry Ghost Festival night.

[Lao remembers the unpleasant phone conversation when Mr. Kong called him]

Mr. Kong:
Lao!

Lao:
Yes Mr. Kong?

Mr. Kong:
That algorithm has to be finished by the time I get to the lab tomorrow morning. I don't care what it takes.

Lao:
But Sir, tonight is Hungry Ghost Festival night, everybody in China are going home early.

Mr. Kong:
I'm not the boss of everybody in China, I'm the boss of you. I bought that CRISPR kit for the lab, and I want you to make me an algorithm that automatically targets a gene by function. I run this company to make a lot of money, and the best investment is to take a 400 dollars CRISPR kit and to find a cure for cancer, then this company will be worth 400 billion dollars. Get it?

[Mo model gets a spotlight and we see the the blue "screaming hand"]

Lao:
But Sir, do you expect me to sleep on the lab's floor?

Mr. Kong:
No, I expect you to work all night and finish that algorithm on time. See you in the morning.

Lao:
Yes Mr. Kong, good night Sir.

[The phone conversation ends.]

Lao:
I bet all the normal people in China are at home with their families.

Guan:
But Lao, the two of us don't have families.

Lao:
I know, but you probably wanted to meet with that boyfriend of yours Doctor Yao, right?

Guan:
No, Doctor Yao is doing experiments today and told me not to bother him.

[Guan remembers the unpleasant phone conversation when Doctor Yao called her]

Guan:
Hi Yao! So nice of you to call.

Doctor Yao:
Doctor! I told you to refer to me as Doctor!

Guan:
I'm sorry Doctor, Yes Doctor.

Doctor Yao:
You stupid girl, can't you do anything right?

Guan:
I'm sorry doctor, I will await for you in the evening then Doctor?

Doctor Yao:
No, I have more important things to do at work, So your bruises have one night to heal.

[Doctor Yao says this with a sneer and hangs up the call]

Guan:
Thank you Doctor. Hello? Hello?

Lao:
So I guess you're going home soon?

Guan:
No, I'm afraid I'm also staying in the lab tonight, of my own accord.

Lao:
What? I mean, don't get me wrong, I'm very happy that you'll keep me company, but why would anyone choose to stay here at night?

Guan:
I can't tell you, you'll laugh at me.

Lao:
Tell me, I promise I won't laugh.

Guan:
OK. Tonight is not just any night. As you said, it's Hungry Ghost Festival night.

Lao:
I know... so?

Guan:
So the gates of hell are open, and hungry ghosts roam the dark streets!

Lao (smiling affectionately) :
So you're afraid of the evil spirits outside?

Guan:
I guess you don't believe of evil spirits at all.

Lao:
That's not true. I'm afraid of the evil spirits inside.

Guan:
Like evil people? Like what the Japanese did in Unit 731?

Lao:
I'm talking about much worse things. I'm talking about 731 squared. But I like you very much and I don't want to upset you with such a terrible subject.

Guan:
I don't think it's so terrible to know the reality. I think it's much more terrible to ignore the bad things. If we know more details about something that's bad then we can figure out how to fight it or escape it.

Lao (looks admiringly at Guan):
OK but now it's your turn to promise not to laugh. Just hear me through, it will make sense at the end. It's also the reason why I couldn't bring myself to finish the algorithm I've been working on.

Guan:
OK I promise not to laugh. Wait, I've got something that will loosen your tongue.

[she goes to her backpack and comes back with Baijiu (Chinese Vodka). Then she goes to the lab's coffee area and brings two mugs. She pours half a mug for each of them. Each of them takes a large sip.].

Guan:
Alright, I'm listening. Who are these people that are as bad as 731 to the power of 2?

Lao (hesitating):
Well... it's us.

[Guan punches him hard to his shoulder]

Lao:
Ouch! What was that for?

Guan:
I thought you had something serious to tell me!

Lao:
I didn't mean just us, I mean as a country, the whole of China.

[Guan punches him to his other shoulder]

Lao:
Ouch! What did I do now?

Guan (in a sad voice) :
You mean the Falun Gong organ harvesting, the turturing in the Uyghurs camps, enabling economically North Korea's atrocities, developing and exporting "Big Brother" digital police state. You hate China, don't you?

Lao: I don't hate China, China is my country and I love China. In fact I believe Chinese people on average have the highest intellect and are the hardest working compared to other nations. So I think it is our justified right to be the next world dominating superpower. And yes, China is doing some terrible human rights violations that I wish would stop, because they tarnish an otherwise glorious country. But no, I'm not talking about these things now, I'm talking about something that eclipse them all.

Guan:
Well then, what could possibly be so diabolic? And what does it have to do with your algorithm?

[They both take another big sip of Baijiu]

Lao:
Do you know who invented the algorithm?

Guan:
Some European guy hundreds of years ago?

Lao:
It was a guy who worked in Baghdad which is now Iraq, 1200 years ago. His name was Al-Khwarizmi and this is the source of the word algorithm. This guy also invented algebra and also gave it its name. But it wasn't an accident that it happened in Baghdad.

Guan:
Why? The people in Iraq were so smart?

Lao:
This guy Al-Khwarizmi was Persian which is today Iran, not Iraq. But he came to Baghdad because that was the world center for scientific knowledge. But the point remains - why did Baghdad become such a center?

Guan:
Because they were smart?

Lao:
The ruler of that empire was a Caliph (which is like a Sultan) by the name of Harun al-Rashid. He founded the House of Wisdom. This was also called Grand Library of Baghdad. Anyone who passed in the empire's territory with a book, they would take the book, sometimes in exchange for money, other times by brute force, and they would copy the book content to this grand library and translated everything to one langauge - Arabic. Scholars came from as far as India and China.

After that caliph Al-Ma'mun invested even more money into the project, scholars and translators had high salary and status. He was the first ruler to invest in "Big Science": expeditions to mapping the world, measure our planet size, excavations of the pyramids in Egypt. Books were so valuable to him, that after a war against the Byzantine Empire the caliph agreed to peace only if they let him read Ptolemy's Almagest - the best book about astronomy back then.

Guan:
So I was right, they were smart!

Lao:
Yes, but do you see what I'm getting at with this?

Guan:
I guess so. You're saying that China today is stealing intellectual property like patents and technological secrets from all over the world with hackers etc, and also attracting many of the best minds to study and work here with good money. So we're building a modern day House of Wisdom and the new algorithms will be discovered in China.

Lao:
Yes, exactly.

Guan:
So? I don't think it's such a bad thing.

Lao:
The problem is not how we get the knowledge. I use pirated knowledge websites like Library Genesis and Sci-Hub everyday and I think knowledge should be free, so that's not it.

Guan:
So...?

Lao:
The problem is what we do with the knowledge, and even more so what happens afterwords.

Guan:
You're worried that we will develop weapons? Is it better if other countries will develop these weapons first?

Lao:
Are you going to hit me?

Guan:
No! I'm a kind and compassionate person.

Lao:
This is way beyond weapons of one human country against another. This is about the survival of our entire species against a new race of super creatures. But I have to explain this to you in an orderly fashion, otherwise it sounds like the plot of a Japanese manga.

[Guan laughs, feints an punch to Lao's thigh and then hit his other thigh. Lao laughs too.]

Lao:
What?

Guan:
Super creatures! OK, explain.

Lao:
First of all I want to convince you that given enough iterations, it doesn't matter what's your starting point, evolution will always create intelligence, and from there an infinitely intelligent intelligence.

Guan:
Can you translate this to someone who drank too much Baijiu?

Lao:
That makes two of us. OK so I'll give you a simple example.

Humans were not the strongest or the fastest animal in the African savanna. We don't have big teeth or sharp nails, and still we dominated the planet. We also killed other previous humans who were less intelligent, or at least out competed them, although they were stronger physically.

Guan:

Yes, but intelligence evolved just once, we and all the animals with brain come from the same branch. And other paths to success evolved more than once, like eyes or ears. So it's not inevitable that a brain will develop, and also why do you say infinite? We are stuck in our level of intelligence, which leaves much to be desired.

Lao:
I disagree. the brain was invented one time, because it's the most expensive organ to produce in terms of evolution. But once it was invented, it was never given away. It was very precious for survival. Survival is all about fitting yourself to the environemnt, and the brain is the ideal tool for that. There are animals that went back to the sea and lost their feet for example, or lost eyesight because they live in caves, but no animal gave up on intelligence. People today in countries where they only have to survive amongst other people are getting dumber, but that's because there's still a society with smart people who make the decisions. And even then you see that countries where the dumb people are in charge are doing badly. So real evolution always rewards intelligence above all.

About the infinity I agree that we are stuck on our level and our brains can't get bigger because of the way we're born the size of the baby's head must pass through the birth canal. But if you take intelligence in general and include Artificial Intelligence or AI, then it will bypass humans between 2040 and 2050, which is called the Technological Singularity. And if our history is any indication to what will happen then AI will kill all humans. From there AI will improve itself more and more endlessly.

Guan:
Ok I agree, once you have evolution you will end up with super intelligence sooner or later. Now what?

Lao:
Now I want you to tell me what evolution means.

Guan:
Is that a philosophic question? Like what is the meaning of life?

Lao:
No no, it's a very practical question, and I want to convince you that evolution equals computation.

Guan:
Ha ha, now you sound like The Matrix.

[smiling half drunkenly]
Guan (mimicking Agent Smith) :
Evolution, Morpheus, evolution. ... The future is our world, Morpheus. The future is our time.

Lao (also mimicking Agent Smith) :
The great Morpheus; we meet at last.

[They both laugh]

Lao:

No, I'm serious, think about it:

Evolution always comes to solve a problem: How to pass the genes to the next generation.
If you look at evolution abstractly, evolution is a process of computation.

In order to convince you that ultimately evolution is computation I need to convince you in both ways: one is that evolution brings computation, and the other is that computation brings evolution.

the fact that evolution brings computation is easy to see in wars between people, the group with better technology always wins, technolgoy needs engineering which needs science which needs mathematics. But even in animals, their brain is calculating where their prey is or were their enemy is, and if they get the calculation wrong they don't survive.
The other direction, that computation brings evolution requires us to look at genetic algorithms like the ones used by Hod Lipson and Michael Schmidt*, who made a computer Program that self-discoverd laws of physics!

*Computer Program Self-Discovers Laws of Physics
https://www.wired.com/2009/04/newtonai/

[Guan falls asleep on Lao's shoulder]

[Lao shrug his shoulder gently to wake her up]

Lao:
Hang on just a little more.

[Guan straightens up and yawns]

Guan (sleepy) :
I can't...

Lao:
Are you dead yet?

Guan (surprised) :
No!

Lao:
Then you can hang on just a little bit more.

[Guan smiles]

Lao:
In the beginning the program creates random combinations from elementary arithmetic operators. And then the evolutionary process begins.

(1) the program chooses from all the failed attempts (equations), those who were a slightly less wrong (choosing the best).

(2) The program changes a little the failures that look these best failures.

Lao:
Guan? Are you awake?

Guan:
Yeah... best failures

Lao:
Do you know what makes a computer powerful or in other words fast?

Guan:
What?

Lao:
Two things: Frequency and Parallelism.
Up until 2004 the main improvement was in frequency - how many generations of improvements you manage to do.
From 2004 until today, the main improvement is in parallelism - how many possible versions of improvements you check in each generation.

Guan:
Like a super computer is made of many small computers that each works on a small part of the problem. Right?

Lao:
Right! Do you know of some technologies are even more powerful then an electronic super computer?

Guan (sleepy):
I heard about Quantum Computer.

Lao:
You're right. Quantum computing is one of them. Others are: biological computing (like DNA computer), chaos computing, chemical computing, fluidics (fluidic logic in nano technology), and molecular computing.

All of these are digital computing technologies, which means logic gates, but they are much stronger than electronic super computer because they are much more parallel! They check a lot more possible versions in each generation.

[Guan gently rests her head on Guan's shoulder again]

Lao:
So we see that computation equals evolution. And we see that evolution has 2 steps: choose and diversify.

And the product of their multiplication... determines how strong or fast the evolutionary process.

Lao (yawns):
Guan?

Guan (sleepy):
yeah?

Lao:
So now we can answer the question that you asked me about what does 731 to the power of 2 means:

Power 0 means: organic diversification and organic choice.
This is the good process that happened naturally for 3.5 billion years since life appeared on Earth. The diversification step was done by reproduction of a whole organism, and the choice was made by the survival of a whole organism in nature.

Power 1 means: organic diversification and human choice.
This is when agriculture and farming, when humans started to domesticate plants and animals about 10,000 years ago.
This is the samd method that was used by the Japanes in Unit 731 to produce the biological weapon against the Chinese and the Americans, and what many don't know is that the Americans shushed "Operation Cherry Blossoms at Night" which was a biological attack that Japan planned against USA, in return for learning the monstrous scientific knowledge of how to create biological weapons.

But as monstrous as these weapons are, they were still made in the same way that humans domesticated wheat and pigs. Let nature multiply and diversify and then humans choose each time the most "successful" offspring.

Power 2 means: human diversification and human choice.
In 1972 people invented genetic engineering for the first time.
In 2012 people invented CRISPR CAS9 , which is like "Find and Replace" in your text editor, but for genes.
In 2016 people invented CRISPR "Do It Yourself" (DIY) Kits so now anyone can edit genes at home!

Lao and Guan together (in desperation) :
HOW MUCH WORSE CAN IT BE?

[Guan gently puts her head back on Lao's shoulder, and Lao gently rests his head on Guan's head. They both fall asleep and dream and the lights go dark. This is the end of part one of the musical]

PART 2

Somewhere That's Green

https://www.youtube.com/watch?v=Xrw3q7i4Jp4

https://www.facebook.com/littlelabofhorrors/videos/1116151872069012

I know Lao is the good path

But I'm dating a psychopath

Who doesn't care of public health

But only about his wealth

Still Lao is so kawaii

He's cute I don't know why

I dream of our organic farm

Where crops don't cause you harm

Biodiversity gives us a chance

to avoid "classic Maya collapse".

with frankenfood so uniform

plant disease becomes the norm

If we'll grow just one crop then variety will drop

We'll use just nature's gene

Somewhere that's green.

Since humans lived on Earth

We checked what foods are worth

With new genes mixed in foods of old

It's like an alien world

Does shark enhanced tomato

reacts with jellyfish bean?

food safety really mean

Somewhere that's green.

When astronauts returned

From the moon where they did land

We put them in a quarantin

so a plague will not begin

A bug from outer space

Could wipe the human race

With combinations wholly new

What good is all we knew?

We cannot isolate everybody 'cause they chew.

Let's stick to what's been

We must keep things clean

Somewhere that's green

(a dream)

Miss Guan ("Audrey") - farm girl
Mister Lao ("Seymour") - day-worker plowing with an ox
CEO Kong ("Mushnik") - farm owner
Inspector Yao ("Orin") - district inspector from government
Mo evil seed - GMO rice seeds

"Greek Chorus" - rice planters

Lao is plowing the earth of the rice terrace with a water buffalo attached to a plough.

On the dirt road that passes right next to the field, Inspector Yao rides with his Toyota Land Cruiser pickup truck.

inspector Yao stops next to Lao and shouts to Lao through the window

Inspector Yao:

Hey Lao! I see you're still stuck with your stupid buffalo.

Why don't you progress to a tractor like the rest of the world?

Mister Lao:

Well inspector Yao, buffaloes give us milk and meat, they graze the weeds and their dung is a fertilizer and fuel. what use is the machine compared to all these?

Inspector Yao [steps out of the car] :

you're stuck in this village and you're stuck in world views from the middle ages. speaking of feudalism, where is your boss Kong?

Mister Lao [takes a break from his work with the buffalo and gets out of the muddy water]

Manager Kong is out for the day. Would you like to leave a message?

Inspector Yao:

Tell him I brought "golden rice" seedlings for him.

Mister Lao:

I will.

Inspector Yao [stands with his hands on his hips and surveying the field] :

soon you will be breaking your back planting seedlings by hand... you know, a smart person would get a rice transplanter, but i see now that you're as dumb as that buffalo.

Mister Lao:

You love your technology so much, why don't you marry it?

Inspector Yao:

Better watch your mouth Lao! i will marry that sexy piece of ass Guan that you're in love with, while you will marry your buffalo. Where is that stupid bitch anyway?

Mister Lao [annoyed stepping towards Yao] :

Don't you speak of Guan that way!

Inspector Yao [stepping towards Lao]:

or what? what you're gonna do farm boy?

Mister Lao:

The forceful and violent will not die from natural causes.

Inspector Yao [grabs Lao by the collar] :

Is this supposed to be a threat?

Mister Lao [keeps his cool in stoic martial arts fashion] :

No, it's a reminder to myself... say, you have all this energy to attack me, why don't you attack the real enemy here?

Inspector Yao:

What enemy? we're the only people around here!

Mister Lao:

Our enemy is not a person, it's a thing. It's right there wrapped into coils on plastic trays in the back of your pickup truck.

Inspector Yao [releasing Lao and laughing] :

Ha ha... So stupid... You're actually afraid of a little seedling?

Mister Lao:

I'm afraid of something much smaller: one modified gene inside that seedling.

Inspector Yao:

Well you're a big coward, i'll give you that. Do you even know what golden rice is?

Mister Lao:

I do, it's like a gold mine that gives money to the big companies and give cancer to the little people.

Inspector Yao:

typical hillbilly! don't you realize that GMO's in general and "golden rice" in particular helps the little people - it's the only way to feed the growing population and without "golden rice" people suffer from blindness?

Mister Lao:

golden rice is a hoax. if people have a lack of vitamin A, this causes blindness. but there are other ways to get this vitamin A, for example: liver, eggs, butter and cheese from animals, and like orange colored vegetables such as sweet potato carrots and pumpkin, and like dark green leafy vegetables such as broccoli kale and spinach. there is no need for the unnatural insertion of genes from daffodil flowers and soil bacteria into natural rice!

do you know why these huge companies want to sell you this modified rice?

Inspector Yao:

because it's a humanitarian project and they care about the nutrition of the children?

Mister Lao:

Eh'nt - wrong! it's because they want to make money profits from patents. the patents law work in such a way that these companies contaminate our good natural rice dna with their bad modified rice dna, and after that our rice which grew here for free for thousands of years now belong to them! there was a famous case with the farmer Percy Schmeiser in Canada and the Monsanto company. he didn't even buy their modified corn, but his neighbor did, and the wind has blown a little amount of modified seeds into Percy's field, and from now on Monsanto claimed that all of Percy's seeds are the Monsanto company's intellectual property!

it's the same with golden rice: after approvals are given on humanitarian guise the Syngenta company can commercialize whenever they please, and take everything from us! remember what happened in Sparta - the Trojan horse?

We should be like the Trojan priest Laocoon who said: "I fear the Greeks, even when they bring gifts", because like the original Trojan horse this is a "gift" that will kill us all!

Inspector Yao:

These is just are just the opinions of primitive people that are afraid of science and progress! don't you know that in the U.S.A. and Canada 90% of the crops are GMO? soy beans, canola, corn, cotton...

Mister Lao:

There are a few brave and independent scientists like Dr. Vandana Shiva who say this, but most of the scientists are either afraid to lose their jobs or worst, or they are corrupt and play the "game" while they enjoy the money and the power that they get from these very rich companies - the GMO companies. these companies have more money then countries and they control the countries and not the other way around.

As for the 90% of the food in north America is GMO - you are right and it's exactly because in the U.S.A. and Canada the governments are corrupted and serve the interest of the global corporations instead of the little people. the regulation authorities like the U.S. Food and Drug Administration or in short FDA, is run by corrupt people that after they finished their modest paying job in the government (a.k.a. the public sector), go straight ahead to the powerful corporations (a.k.a. the private sector) and get a job that gets them tons of money. it's their prize for helping the corporations do all their evil deeds.

it's like you have a bank robbery, and the robbers are locked inside with the hostages, and then the police comes. and then you expect the the police will stop the robbers, but instead what happens is that the police cooperate with the robbers and help them to escape from the law in a helicopter and as a reward for the corrupt police the robbers and the police split the money from the robbery!

Inspector Yao:

So it's all a huge conspiracy? all the companies in the world pay to all the governments in the world, to frighten all the scientists in the world, to shut up about the huge dangers in GMO?

Mister Lao:

Bingo!

Inspector Yao:

You know i always knew you're an idiot but now you're a psycho too - believing in conspiracy theories. you probably also believe that aliens from outer space come and contact you, so i will stay out of your imaginary world, say hi to the aliens from me.

Mister Lao:

I will.

[Inspector Yao gets to the car, turns around and drives away]

Mister Lao [saying quietly]

Asshole.

Miss Guan [coming smiling from the patch of forest where she was hiding unbeknownst to Lao and Yao]

Hi Lao!

Mister Lao [now smiling too] :

Oh hi Guan! I didn't see you there.

Miss Guan:

I know silly, I was hiding. I went this morning to pick mushrooms in the forest and then i heard your argument, and i eavesdropped. by the way, thanks for standing up for me!

Mister Lao [with a frown] :

How can you be dating this asshole?

Miss Guan:

I don't know, I sometimes ask myself the very same thing... Can I ask you something?

Mister Lao:

Sure, what?

Miss Guan:

You're a martial artist, you know kung fu and all, so when he grabbed you by the collar like

that, I mean... Why don't you kick his ass?

Mister Lao:

My sifu once said half jokingly - that if an enemy is stupid enough to grab you by the clothes, then it's probably pointless to fight him.

Miss Guan [smiling] :

Your sifu sounds like a smart man.

Mister Lao:

yes, but I sometimes ask myself the very same thing...

[they both laugh]

Miss Guan [now serious] :

Did you meant what you said about GMO? I mean that being a huge conspiracy and all?

Mister Lao:

Yes, I know it sounds crazy, but if you got a moment to spare, I'll gladly explain and it will all make sense.

Miss Guan [sitting down on a rock and smiling] :

OK, start talking!

Mister Lao [smiling] :

OK. have you ever heard of the Pusztai affair?

Miss Guan [trying to remember and then gives up]

No... what kind of name is that?

Mister Lao:

Arpad Pusztai, it's a Hungarian name. they don't do many things, but each time they do something it shakes the world:

Leo Szilard is the father of the atom bomb. Edward Teller the father of the hydrogen bomb. John von Neumann the last great mathematician. Paul Erdos maybe the most prolific mathematician. you get the idea.

Miss Guan:

yeah, smart guys... so how did this Pusztai guy shake the world?

Mister Lao:

well that's the funny thing, the world should have been shaken by what Pusztai discovered, but it wasn't. a hidden hand is holding the world in a very firm grip. let me tell you the story in a nutshell.

Miss Guan:

I'm all ears!

Mister Lao:

Arpad Pusztai made the first experiment to check whether GMO food is healthy for people or not. before that he was a biochemist and nutritionist. for 36 years he worked in the leading nutritional research center in Britain. Pusztai was a world expert in his field of study (a kind of plant proteins) and published discoveries books and many papers.

Miss Guan:

ok ok i get it. he was the perfect man for the job. Hold it!

Mister Lao:

what?

Miss Guan:

You keep talking about him in past tense, did the bad guys kill him at the end?

Mister Lao [smiling]:

No. he is still alive. may i please continue the story?

Miss Guan [smiling] :

You may.

Mister Lao [smiling]:

thank you. now i don't want to get to the technical side, i just want to tell you the human side...

Miss Guan [offended] :

why? do you think I'm too dumb to understand??

Mister Lao:

of course not! ok I'll get into the technical stuff too.

Miss Guan [still a little pissed off] :

you'd better!

Mister Lao:

OK. so Pusztai checked genetically modified (GM) potatoes. these potatoes were injected with a gene from a flower called snowdrop. this flower has a natural protection against insects that want to eat the flower. so the flower has a natural pesticide. this pesticide is hurting the gut of the insect. ok so far?

Miss Guan:

they take the insect killer from the flower and put it in the potato.

Mister Lao:

that's right, the companies take the gene that is responsible for producing the insect killer in the flower, and put this gene in the potato.

Miss Guan:

so how did the good guy Pusztai check whether these potatoes are healthy?

Mister Lao:

Pusztai took rats and fed them with potatoes. he divided the rats into 3 groups. one group was eating genetically modified potatoes - potatoes with the gene that produce their own chemical pesticide; the second group was the control group that ate natural potatoes. the third group - and here is the clever part - the third group ate natural potatoes with the chemical sprayed on them.

Miss Guan [wondering] :

what's so clever about it?

Mister Lao:

because let's say he used only 2 groups: GMO and natural. and then the rats ate the genetically modified potatoes and got sick. how can Pusztai know whether they got sick because of the bug killer, or because of other changes that the modified gene caused in the potato?

this is what the 3rd group is for. they eat the chemical but not the gene, so you know if the rats got sick because of the gene or because of the chemical.

Miss Guan [happy] :

I see. I'm starting to like this Pusztai guy.

Mister Lao:

So after 100 days of experiment, which in an experiment like this is a very short time, Pusztai's team discovered that the rats who ate GMO suffered from intestine damage and immune system damage, they also had smaller sized livers and hearts and brains, which means these didn't develop properly.

Miss Guan:

oh wow! so the same thing happens to people who eat GMO?

Mister Lao:

yes and check this out: the TWO other groups in the experiment remained healthy. BOTH the natural potatoes eating group, AND the natural potatoes with insect killer sprayed on them. they remained healthy. only the GMO group got sick.

Miss Guan:

wow this is like a clear cut proof that GMO's are bad. how come this experiment didn't become famous?

Mister Lao:

So just like you did, Pusztai understood what his team discovered, and felt he must warn the public. So he didn't wait for years until the research is over and meanwhile people will die, he told about all this on TV in a 150 seconds long interview on the television program "World in Action".

Here is what Pusztai said:

"We're assured that this is absolutely safe, We can eat it all the time. We must eat it all the time. There is no conceivable harm, which can come to us. But as a scientist looking at it, actively
working in the field, I find that it's very, very unfair to use our fellow citizens as guinea pigs. We have to find guinea-pigs in the laboratory."

"If I had the choice, I would certainly not eat it till I
see at least comparable experimental evidence which we are producing for our genetically modified potatoes."

Miss Guan:

Oh my, now i totally like him! "If I had the choice I would certainly not eat it" ... "I find it's very unfair to use our fellow citizens as guinea pigs"... why aren't all scientists like him?

Mister Lao:

Wait you'll be shocked to hear what happened next...you'll get your answer.

Miss Guan [punching Lao in the shoulder and smiling] :

Quit teasing me....tell me already!

Mister Lao [smiling and rubbing his aching shoulder] :

OK OK... So for two days he was a hero. Pusztai's manager and Pusztai's research institute publicly praised him. but then the bad guys at Monsanto heard from all this and understood that this can stop or at least delay their whole GMO food business. so they called Bill Clinton who was then the President of the United States and told him this Pusztai must be stopped. The U.S. President called the Prime Minister of the United Kingdom who was back then Tony Blair. The Prime Minister's office made 2 phone calls to Pusztai's research institute.

Pusztai was fired from work, he was silenced with the threat of a law suit and threatened with losing his pension which they can do. His wife, Susan Bardocz, who also worked at the same research institute for 13 years, was eventually fired too. Their research was locked up.

Miss Guan [with tears in her eyes] :

What a bunch of fuckers! His only crime was to speak out, in his words, according to his conscience...

Mister Lao [putting his hand around her shoulder comforting her] :

I know. Maybe we should stop here? i don't want to sadden you.

Miss Guan [wiping her eyes with her wrist] :

no i'm ok, please continue.

Mister Lao :

Pusztai's boss and his research institute started spreading lies about how he did a bad job, he got this and that wrong, you name it. in addition they threatened everyone who work there not to talk about what happened, they took his team and put them in other teams. they rewrote what happened it's like George Orwell's book "Nineteen Eighty-Four" where they manipulation of recorded history. Of course when asked about it both Pusztai's boss and his research deny that there was any phone calls or any political or industrial pressure, but we know the truth from witnesses.

The media who at the beginning celebrated Pusztai and did it's job to watch the public now watched their commercial interest instead:

The Times said "Scientist’s potato alert was false". The Mail wrote: "Got it Wrong". The Guardian wrote: "In one of the most embarrassing admissions by a scientific institution in years, his superiors announced that the biologist – a world authority in his field – had been talking about the wrong potatoes".

Scientists and politicians alike vilified Pusztai.

Miss Guan :

What happened to Pusztai?

Mister Lao :

Pusztai had two heart attacks and the saga has left him and his wife, Susan, needing permanent medication for high blood pressure.
the Pusztai affair happened in 1998 and since then all the scientists in the world are either bought or afraid. But I'll tell you a quote that Pusztai said, that will cheer you up a little. he reminds me of you.

Miss Guan [leaning her head on Lao's shoulder] :

I can definitly use a cheer up.

Mister Lao :

"They picked the wrong guy - I will kick the bucket before I give up"

Miss Guan [laughing quietly into Lao's shirt] :

I like him very much.

Mister Lao :

So now do you see what I meant when I said it's a conspiracy? We are used to think about the word conspiracy in the context of "conspiracy theory" like crazy people who believe NASA never landed on the moon and it was filmed in Hollywood. But this here is not a false conspiracy, it's the biggest conspiracy of all.

Have you seen the movie Idiocracy?

Miss Guan :

Yes I loved it! [imitating Frito] "I like money"!

Mister Lao [chuckles]:

So remember the part when the narrator says:

"Water, the basic component of all life...
had been deemed a threat to Brawndo's profit margin.
The solution came during the budget crisis of 2330...
when the Brawndo Corporation simply bought the F.D.A...
and the F.C.C... enabling them to say, do and sell...
anything they wanted." ?

Miss Guan :

Sure, when the whole food pyramid fills with Brawndo logo.

Mister Lao :

Exactly, so it's already like that in real life.

The "food czar" of America from 2010 to 2016, which is the FDA's boss when it comes to food, was Michael Taylor. In the movie "The World According to Monsanto" they explain the "revolving door" he worked in the FDA, then he worked in Monsanto, then he worked in the FDA again. They don't need to buy the building, they buy everyone inside the building, or at least the decision makers.

Miss Guan :

And look at President Donald Trump. Idiocracy isn't the future. It's right now.

Lao and Guan together (in desperation) :
HOW MUCH WORSE CAN IT BE?

[Guan gently puts her head back on Lao's shoulder, and Lao gently rests his head on Guan's head.
They both fall asleep and dream and the lights go dark. This is the end of part two of the musical]

PART 3

Son Be a Geneticist

https://www.youtube.com/watch?v=2CWmCEjzrj8

https://www.facebook.com/littlelabofhorrors/videos/290098398665295

[Yao ãå÷èåø]

When I worked shifts, just a bad young doctor,

My mama noticed things i've done of horror,

ignore the net result forget adverse effects,

prescribe unnecessary treatment for gents,

hospital acquired infection 'till they're dead.

That's when my mama said

[Chang âáøú , Feng âáøú , Lei âáøú]

What did she say?

[Yao ãå÷èåø]

She said, "My boy, I think someday

You'll find a way

To make your irresponsible tendencies pay

You'll be a geneticist

Your cures will be worse than any disease

Son, be a geneticist

Join the big killers in the big pharma biz

no Hippocratic Oath, patent breakthroughs instead

operation successful though the patient is dead

Son, be a geneticist

You'll be a success

[Chang âáøú , Feng âáøú , Lei âáøú]

Here he is, folks the champion of CRISPR!

Watch him hack Mother Nature then he kills her.

Playing God!

He's a gamblin' with our lives - that can't be good.

Who wants their ecosystem done by Dr. Frankenstein?

[Yao ãå÷èåø]

I'm your geneticist

I'll try to tackle the plastic pollution

[Chang âáøú , Feng âáøú , Lei âáøú]

He'll really try

[Yao ãå÷èåø]

I'm your geneticist

Organic matter eating bug is my solution

[Chang âáøú , Feng âáøú , Lei âáøú]

We'll really die

[Yao ãå÷èåø]

Oops it devours plants and animals and mankind

[Chang âáøú , Feng âáøú , Lei âáøú]

Mankind

[Yao ãå÷èåø]

So what I only got the Noble Prize on my mind,

And though I throw the baby out with the bathwater

Somewhere, somewhere in heaven above me

I know, I know, that my mama's proud of me

Oh, mama

'Cause I'm a geneticist and a success

[Yao ãå÷èåø]

Now die!

(a dream within a dream)

Miss Guan ("Audrey") - paramedic
Mister Lao ("Seymour") - medical resident (intern)
Chief Physician Kong ("Mushnik") - head of the hospital ward
Doctor Yao ("Orin") - megalomaniac attending physician
Mo epidemic ("Audrey II") - flasks with deadly pathogen.

"Greek Chorus": nurses.

Miss Guan:

I want us to use our brains, i can feel my brain cells dying. Ever since Chief Physician Kong put us in a quarantine because of the CoronaVirus. everyday we're binge-watching series and

movies. I feel like I'm turning into a zombie.

Mister Lao:

me too, but what can we do? it's been a week of quarantine now and we have one week to go. none of this would have happened if the senior staff, like your boyfriend Doctor Yao, would share the burden in this public hospital. but instead all the work every night is left to us, while the senior go and make money in their private clinics.

Miss Guan:

i wanted to e-mail to Chief Physician Kong about it but Yao said i'm a stupid bitch and that he will not help me if Chief Kong will fire me. Now we might have CoronaVirus because the hospital is short on staff at night. So they forced us to work shifts in infected wards which we're not equipped to do, and now we're here.

Mister Lao:

I know what we can do, after each binge we can discuss it. like what we did in class in school in literature lessons.

Miss Guan (smiling) :

Lao you're an uber-nerd. you know that don't you?

Mister Lao (smiling) :

I'll take it as a "yes". ok so who starts?

Miss Guan:

ladies first! so the latest one we binge-watched together was Star Trek Piccard.

Mister Lao (frown) :

Oh that...

Miss Guan (surprised) :

what do you mean "oh that..."? i thought it was very nice. it had all the characters from Star Trek The Next Generation, and Seven of Nine which I really like.

Mister Lao :

it was very nice on the surface of things, it had all the external appearance of the previous shows, but it is missing the essential element that was the heart of all the Star Trek series up until today.

Miss Guan :

You mean that it doesn't want to be science fiction anymore with Picard saying he "never really cared for science fiction", and the plot has minimum strange alien creatures and spaceship fights action and maximum philosophy and drama?

Mister Lao :

I haven't thought of that... you're right. No, I mean something more fundamental.

Miss Guan :

You mean that the purity is gone? the fact that the federation is not the idealistic and optimistic anymore, all because of a terror attack? the language that the head of Star Fleet tells admiral Picard: "at long last, shut the fuck up!", the fact someone murders and then forgiven as if nothing happened?

Mister Lao :

You're getting warmer... but it goes beyond their values, i'm talking about the whole message of the show. i'll tell you what bothers me. Star Trek was always the show that had the balls to say "technology is not the solution. technology is the problem". Picard breaks this principle.

Miss Guan :

are you kidding me? Star Trek always had TONS of technology. people always laugh at their technobabble and call it treknobabble: "It appears to be a multi-phasic temporal convergence in the space-time continuum."

Mister Lao (laughing) :

I know... but that's not what i mean. Think about all their previous series, who were the worst bad guys?

Miss Guan :

let me think... The Original Series - strange alien enemies, The Next Generation - the Borg cybernetic organisms linked in a hive mind, Deep Space Nine - Vorta genetically engineered clones, Voyager - again the borg collective, Enterprise - Cabal Suliban with genetic engineering enhancements, Discovery - sentient AI called Control...

yes... i see your point now, everybody except Captain Kirk fought evil technology.

Mister Lao :

Captain Kirk too. think back - who was Kirk's arch-nemesis , the one he hated the most? one word will come to your mind...

Miss Guan and Mister Lao [looking at each other and then shouting together] :

KHAAAAAN!!!

[they both laugh]

Miss Guan :

You're right Khan Noonien Singh was a genetically engineered superhuman!

Mister Lao :

Right! The Eugenics Wars which were between natural humans and genetically engineered super-humans.

Now what happened for the first time ever in Star Trek Picard?

The artificial intelligence robots are the poor victim of unfair xenophobia from narrow minded humans, and in the end the AI and the humans are best friends forever and even merge! The creator of Star Trek - Gene Roddenberry - must be turning in his grave.

Miss Guan :

Wow that was really interesting, i never thought i would enjoy analyzing a TV show like this. hold on - i'm getting a super nerdy idea - tell me what's your opinion.

Mister Lao :

I agree let's do it!

Miss Guan [chuckles] :

Wait until I'll tell you what my idea is! ok... i suggest the next show we binge-watch we'll pick a show about an important issue from real life, i mean a documentary, and we will make a debate! of course it needs be a controversial issue, so we can each choose one side and raise convincing arguments.

Mister Lao :

Sounds cool! what issue do you feel like debating about?

Miss Guan [smiling] :

Well with all this KHAAAAAN and all, let's pick genetic engineering as our topic. I'll be for and you'll be against. deal?

Mister Lao [smiling] :

deal! so let's watch together the best documentary show about it, and write notes to ourselves during the show on paper, and then let's each take one hour to prepare our arguments, and then we do the debate.

Miss Guan [searching on the internet] :

Sounds good to me! here there's a 4 part documentary in Netflix called "Unnatural Selection". bingers let's get binging!

Mister Lao:

oh oh oh wait! i would like to suggest an improvement. your boyfriend doctor Yao is a geneticist. and he's working with CRISPR Cas and drive genes. so he can represent the pro-GMO and i'll represent the anti-GMO, and you will be the judge between us.

Miss Guan:

that's a great idea in theory but you know Yao despises you and is disrespectful towards me, so he wouldn't want to play with us.

Mister Lao:

i know, but we can only talk to him on video chat like Skype anyway, because of this quarantine. so all we need is for him to state his arguments that support the GMO, so he will give them one after the other a few minutes, and we'll record what he says.

then after we finish the conversation with him, we can play his arguments from the recording, one at a time, giving me the ability to rebuttal what he said and giving you the ability to sit and judge between us.

Miss Guan:

this solves the part of him not wanting to talk with us for an hour, but how do we solve the part of him not wanting to talk to me for a minute, and him not wanting to talk to you for a second?

Mister Lao:

we'll use his vanity against him. we'll pretend to be interviewing him from a prestigious scientific magazine and ask him as an expert in this field to give us 10 arguments in favor of this technology, and we'll offer to publish his name as an expert for the public to see.

Miss Guan:

but he knows our voices, he'll never fall into believing one of us is a reporter from some newspaper. and if we use a vocoder like a translator or something it's an automated robotic voice, and he'll get suspicious.

Mister Lao:

so it won't be us and not a computer. we'll use someone else's voice. someone that you pay to say whatever you ask for. i know - we'll contact a paid erotic private chat girl.

Miss Guan [laughing] :

are you nuts? those girls that strip on the webcam and talk dirty for money?

mmmmmmmmm... ok that solves the unfamiliar voice alright! but this raises new problems: number one, chat girls don't call you, you call the chat girls. how do you get Yao to call a chat girl, and how do you make him believe she's a news reporter? number two, will she know what to say to Yao? and number three, how will we record this conversation that we're not even a part of?

Mister Lao [thinking for a moment] :

we WILL be a part of the conversation, only Yao will not know about it. we'll tape the microphone of the computer to the speaker of the phone, and we'll tape the speaker of the computer to the microphone of the phone. so that Yao thinks that the girl is speaking with him on the phone. and if put our ear next to it we hear as well, and we can record the conversation using the computer or the phone.

the first thing that we do is start a video and audio chat with the girl and explain to her our situation, and we give her a little detail on doctor Yao and on herself as a reporter like give her a fake name and title so she sounds more reliable. as long as she gets paid for her time she doesn't care what you ask her to say.

then you will call Yao on Skype and say that a reporter called the hospital, and the hospital operator tried to transfer the call to him but there was a technical problem, so they transfered the call to your mobile phone.

and you will stress the fact that the reporter needs just 5 minutes, and the reporter already wasted a lot of time on this, and you're afraid that if we hang the line she'll simply skip to the next geneticist on her list.

Miss Guan [laughing] :

and since it's a video chat we can also write to her what to ask and signal her on the camera... this might just work! when i said i wanted to use our brain i didn't take into account your criminal mind. ha ha i'm kidding i know it's for a good cause. ok so let's go!

[after eavesdropping on Yao and the webcam model, and a few hours of binge-watching the show]

Miss Guan [announcing dramatically] :

10, 9, 8, 7, 6, 5, 4, 3, 2, 1, times up!

Mister Lao [smiling] :

OK OK... i'm putting my pen down. but before we begin, i tried to analyze whether or not our discussion is practical. in mean if we humanity decided to stop CRISPR Cas and Gene Drives - can we do it or is it too late? In other words: "is the genie already out of the bottle?".

Miss Guan:

you succeeded in making me curious... give it to me!

Mister Lao:

ever since Josiah Zayner sells CRISPR kits for $400, the physical hardware is available for anybody. he also made the basic knowledge available in Youtube - Bioengineering 101.

the question now remains can we keep secret this "recipe" of how to make a biological weapon? if it's just a file that anyone can download on the dark-net, can we stop this information from falling into the wrong hands?

Miss Guan:

this is the question, but how can you say anything intelligent about a future event?

Mister Lao:

a-ha! but it's not really the future. we have an analogue today where the bad guys try to reach information and use it to kill innocent lives - computer hacking to military information. by the way, Eugene Kaspersky also compared cyber weapons to biological weapons.

Miss Guan:

do you really think cyber warfare is as dangerous as weapons of mass destruction?

Mister Lao:

think for example what might happen if a terrorist organization got the launch codes and frequency and encryption of whatever is in the nuclear briefcase that can start World War III: the "Nuclear Football" of the American President, or the Cheget of the Russian President.

Miss Guan:

you got a point... so you checked if a country can protect itself against hackers?

Mister Lao:

yes, but i only consider superpowers: USA, China, and Russia. only superpowers are sophisticated enough to protect from hackers.

Miss Guan:

ok so what's your conclusion? can a superpower protect itself from hackers or not?

Mister Lao:

it's a little long, so bare with me here. we have 4 levels that we need to check:

can a superpower (USA/China/Russia) defend from another superpower? NO.
USA and Russia hack into each other's electricity power grid, China stole the plans of the F-35 jet fighter from U.S. defense contractors, and built the J-31 and J-20. so we conclude that even a superpower cannot protect its information from another superpower.

can a superpower defend from an ordinary country? YES. if we take Iran and North Korea as examples, they never did serious damage to a superpower (for example SONY movies). so we conclude that a superpower can protect its information from an ordinary country.

can a superpower defend from an organization? YES. organizations like Anonymous can't do any real damage to superpower (only shut down websites). cyber-crime organizations used ransomware against Chinese Public Security Bureau and against Ministry of Internal Affairs of the Russian Federation, but i guess it's because these are not very classified. so we conclude that a superpower can protect its information from an organization.

can a superpower defend from a single person? YES. There are cases of lone hackers like Gary McKinnon and Jonathan James and Ehud Tenenbaum hacking into U.S. military computers from the outside. these benign pranks are done by young or mentally ill people as mischief, with very low total harm, so we conclude that a superpower can protect its information from a single person.

SO THE FINAL CONCLUSION IS THAT IF THE U.S.A. CHINA AND RUSSIA WILL WORK TOGETHER THEY CAN PROTECT US ALL, AND THE WORLD CAN STOP CRISPR CAS GENE DRIVES!

Miss Guan:

hold your horses! i now agree that it COULD be stopped but you still have to convince me that it SHOULD be stopped.

Mister Lao:

you're right. so we've got 7 arguments from Yao, from 7 different aspects of the issue. so let's replay them one at a time, and i will rebattle, and you will judge. and at the end you declare your final verdict.

debate on CRISPR cas and gene drives

Miss Guan:

agreed. so let's start with our first subject:

INDIVIDUAL RIGHTS
****

Doctor Yao:

every person has a basic civil liberty to enjoy what science has to offer like improved health.

if you will forbid and criminalize something like this, it will be like the prohibition of alcoholic beverages in the United States when the mafia headed by violent gangsters like Al Capone ruled the streets because people need to drink booze.

Mister Lao:

it's my turn? ok so I represent the "against CRISPR Cas and Gene Drives" side.

i claim that this is nothing like alcohol. people made beer 13,000 year ago. people only made CRISPR-Cas9 in the last few years. CRISPR is not a basic need. we did very well without it for all of history. what's more, alcohol only destroys one life or one family at a time. as opposed to one CRISPR Cas gene drive, which can destroy the whole world!

i suggest it's more similar to another right, the right to buy guns in the U.S.A. which was born in times and places like The Wild West, and now is completely wrong. every short while you hear of an automatic weapons massacre in the U.S.A. only because it's freely available. Once it's everywhere you can't turn back the wheel. with biological terror we can still stop it from starting!

Miss Guan:

ok. are you finished?

Mister Lao:

no, there's more. CRISPR Cas gene drives aren't like a gun. they are like nuclear bombs. they are global killers. today it's bad that a few people in the world have nuclear bombs, but the solution is NOT to hand out nuclear bombs for everybody. it's only a matter of time until one crazy person will kill a whole city. in fact the potential damage of genetic change is much bigger than nuclear bombs, because it replicate itself all over the world. so it's equivalent to a whole out nuclear war that wipes out humanity.

Miss Guan:

cool. so as the judge, i need to decide between people's natural right for the fruits of modern medicine and people's right to be protected from the danger of global terror.

for the individual that his life is saved by a new medicine he doesn't care about the world but only about himself or herself. but as a judge here i stand for the best interest of humanity as a whole.

i believe that just as the benefit of nuclear power is not worth the constant extinction threat for humanity as a whole, the same goes for a technology, no matter how tempting, that has the potential to cause extinction.

in any decision we decide between pros and cons. in order to do this, if it's a good thing, we must multiply the probability that this thing will happen by the benefit that this thing will bring us. or if it's a bad thing, multiply the probability by the damage.

in our case the damage in this bad thing of global terror is the ultimate damage, so even if the probability that it will happen is very small, we can not take this risk.

the only way to balance such a danger is for example if humanity as a whole was about to go

extinct in the near future and this technology is the only way to save us.

so in the subject of individual rights, i rule against CRISPR Cas and Gene Drives.

Mister Lao:

wow that was awesome!

Miss Guan [smiling bashfully] :

thank you, so we move the our next point:

AGRICULTURE AND FOOD
****

Doctor Yao:

the world has 8 billion people and with our current technology we can't feed them all. in order to sustain the growing population, we must have a new agricultural revolution, like that of the Green Revolution of the 1950's.

the huge death toll will come not only from the famine itself but also from the wars and political instability. also people from the poor global south will try to immigrate in huge numbers to the rich global north. these poor countries will be a hotbed for crime and terror.

Mister Lao:

the Earth can not support so many people, not in terms of CO2 emissions which bring climate change and ocean acidification, not in terms of fresh water consumption, not in terms of plastic pollution and so on. the green revolution of the 1950's was what brought us to this problem.

in the 1950's there were 2.5 billion people and now after 70 years there are 7.5 billion people. this situation cannot be allowed to continue. if we grow further we are just like stupid bacteria in a petry dish that multiply and multiply until they fill the plate and they all die. it is not a popular thing to say, but the world's problem today is not the shortage of food, it's the surplus of people. if we put more people on the planet we are just making this worse.

as for the population that is already on the planet, all of us, GMO is a huge food problem, not a solution. here is why:

at one point of the un-natural selection documentary, the woman is worried that they will eat Ramen Noodles. why? because Ramen Noodles contain MSG (Monosodium glutamate) and TBHQ (tert-Butylhydroquinone). This is only one example. today bodies like European Food Safety Authority (EFSA) and United States Food and Drug Administration (FDA) protect you about what exactly you put in your mouth. But tomorrow when instead of a tomato being a tomato, one tomato inside will contain genes from a shark a mushroom and a butterfly, and the other who knows what, you have no idea what monstrosities you put in your mouth!

Miss Guan:

ok. so as the judge, this is more tricky because Yao is warning about things that are already happening like wars because of food prices like the war in Syria for example, and Leo talks about future things like when the human kind will exceed the Earth's capacity for the maximum number of people it can support.

but if we consider the problem by the numbers it's clear that Lao is correct and this future comes very quickly and surely. the population curve is an exponential function. let's take Africa. good hearted but short sighted people give them food and vaccines, so each person creates a few more, and each of these creates a few more, and this is exactly an exponential function that shoots right up into the sky.

on the other hand the green revolution with all its fertilizers and pesticides and so on multiplied our food production a few times, let's say doubled it or tripled it. it's clear that a linear function can never grow as fast as an exponential function.

so if humanity wants to survive on Earth we have to deal with the source of the problem and convince people to make less babies. this can be done by a nice way like educating the young girls, or by a less nice ways as punishments for large families or even forced sterilization after one child.

this isn't politicly correct but it is 100% correct. it was said in 1798 by Thomas Robert Malthus who was an inspiration for both Darwin and Wallace, and it is true today. population multiplies geometrically and food arithmetically

on top of this it is not sustainable for the human population to grow any further like Lao explained, we are already over exploiting the planet as it is. we are melting the polar region, this is not just the problem of the polar bear. this will kill all humans. we are cutting down the forests. this is not just the problem of the orangutan. this will kill all humans. we are making our oceans acidic. this is not just the problem of the sea shells. this will kill all humans.

on top of that we have the poisonous food problem that Lao mentioned which is enormous!

we humans tested which plants and which animals are edible since the first caveman picked the wrong berry or the wrong mushroom and died. now we shuffle all the cards genetically. doctors today don't even have a table that says which prescription medicine has a contraindication with which other medicine.

it goes without saying that we don't know how the dozens of chemicals within each plant or animal interact with each other, and now this ignorance goes up a hundred folds when we talk about knowing how every gene in every species interact with every other gene in every other species.

so in the subject of agriculture and food, i rule against CRISPR Cas and Gene Drives.

Mister Lao:

thank you for backing me!

Miss Guan:

i'm not backing you, i'm backing common sense. ok so our next subject is:

BASIC SCIENCE
****

Doctor Yao:

we are like a little kid that came to the sea shore for the first time, and is afraid to enter the water. how can we ever sail in a ship over the horizon like this? knowledge is a tool just like fire can heat and cook or can burn and destroy. we are at the doorway to a new world of discoveries in biology.

the thing which defines us humans is our natural drive to explore. this is how science advances and progress of science is always a good thing. anyone who is against science is no better than the Catholic Church when they imprisoned Galileo Galilei. had the Catholic Church won, Neil Armstrong would have never made that one small step for man on the moon.

remember the Human Genome Project in 2003 ? this was the first step in this important direction. the whole world helped and cooperated. this now is the next natural step in the same positive direction. let's take this next step for all mankind.

Mister Lao:

these are nice dreams, but superpowers don't fund technology because they are curious. super powers try to make biological weapons, armies of clones, super human soldiers and the stuff of nightmares. America's race to space started because of the fear of the Soviet Union's Sputnik, and declined constantly since 1991 when the Soviet Union collapsed.

another manipulation is that history repeats itself, people are always afraid of new technology, etc. this is not true. in the 19th century science was good - vaccines, electricity. in the 20th century science was a tool for good or bad - chemical, nuclear. in the 21st century science is bad because our technologies now are self replicating and they evolve by themselves and mutate out of our control. see Bill Joy "Why The Future Doesn't Need Us". this article explains several reasons why genetic engineering is more dangerous than weapons of mass destruction. it was true when it published in 2000 and it's all the more true now after CRISPR Cas Gene Drives and CRISPR Cas kits.

most scientists are afraid to lose their jobs because of the huge power of the pesticide and GMO companies: Syngenta, Bayer, Monsanto, Dow Chemical Company, BASF, and Dupont. see for example what happened to the government employed scientists Dr. Shiv Chopra, Dr. Margaret Haydon and Dr. Gerard Lambert in Canada. they worked in Health Canada, which is the health policy department of the Canadian government. these three whistle-blowers testified before the Senate of Canada trying to defend the public's food safety from Monsanto. and this is why Health Canada fired all three of them! Shiv Chopra later wrote the book: "Corrupt to the Core: Memoirs of a Health Canada Whistle-blower".

but still a few brave scientists warn against the dangers in CRISPR: "A prudent path forward

for genomic engineering and germline gene modification" signed by 18 scientists and ethicists including Professor Jennifer Doudna the co-inventor of this technology! DOES SHE NOT UNDERSTAND THE TECHNOLOGY?

another example is "Open letter for conservation with a conscience: no place for gene drives" signed by 30 international conservation and environmental leaders including Dr. Jane Goodall, Dr. David Suzuki, Dr. Vandana Shiva. DO THEY NOT UNDERSTAND ECOLOGICAL SYSTEMS?

professor Kevin Esvelt who invented CRISPR gene drive, said at first that it can be used to save endangered wildlife from extinction. Esvelt later retracted his support for the idea, except for extremely hazardous populations such as malaria-carrying mosquitoes and isolated islands that would prevent the drive from spreading beyond the target area. DOES HE NOT SUPPORT SCIENCE?

At some point in the documentary Josiah Zayner talks about a company that wanted to send this to Iran. He says there's nothing wrong with it. Wow let me think Iran. Declaring it wants to annihilate Israel every so often. Biological weapons. What could go wrong?

He's very caring but not about cancer patients, he cares about his psychopathic ego. All this rationalization about human side, what about the people on the other side of the rocket which will contain biological weapons in it?

Miss Guan (smiling) :

lucky for you're there is no time limit because it's not a real debate! as the judge i need to choose between the optimistic Doctor Yao who thinks everything will be wonderful, and you Lao who say we need to stop now because we are on the precipice now and our next step will cause us to fall off a cliff. i always think we should err on the side of caution.

everyone who is pushing us to go forward do this out of pure interest whether it's money like the companies or publicity like the scientists. let's take Monsanto for example. they made Agent Orange, they made DDT, the made Bt cotton, they made Roundup, i'm sorry but they're just not very nice people.

superpowers are run by people which are also not very nice. take the U.S.A. for example. they knew what the Japanese did to us in WWII in unit 731 the horrible biological warfare research and still let the go free in return for the information of how to make biological warfare. they threw the only nuclear weapons that were ever thrown, although you can see in "The Untold History of the United States" that it was unnecessary. they murdered their own president JFK. they worked with Nazies like Wernher von Braun for the space race, and for money like IBM. in 2014 they supported Yoshihiro Kawaoka an American Japanese virologist to recreate the Spanish-flu virus that already killed 40 Million People in 1918! that's in spite of the fact that in 1969 their President Nixon announced that the U.S. was unilaterally renouncing its biological warfare program.

so if i need to think what will this combination of not very nice at all people in the Military–industrial complex have in store for us, we must not be naive. we must put a moratorium on GMO in general, CRISPR technology in particular, and most of all on CRISPR Cas Gene Drives.

so in the subject of basic science, i rule against CRISPR Cas and Gene Drives.

Mister Lao:

thank you! what is our next subject?

PROFESSIONAL STANDARDS
****

Doctor Yao:

if we make this legal and openly we can supervise with regulation, we can impose professional standards.

if we forbid this in the mainstream, people will do this in a dark alley illegally which will lead to deaths because of malpractice and irregular and low quality equipment and personnel.

Mister Lao:

this is similar to the first subject we discussed, is it a basic need or a basic right? but then we looked from the side of consumer or patient and now from the side of the producer or clinic. but it's still the same logic.

it goes back to the questions whether we could and whether we should stop the CRISPR Cas entirely at least to the public. and from our preliminary question we saw that with the help of the superpower nations we can stop it. and from our subjects until now we saw that we also have to stop it.

Miss Guan:

a short answer - way to go Lao!

if we were talking about prostitution which is a basic need of people - everybody wants sex and not everybody has a girlfriend, and we don't want want people to rape other people. by the way society's disrespect for prostitutes is very hypocritical because women who marry men for their money or want a rich husband are just the same. if not worse because a prostitute usually has no choice.

so yes we want to legalize it like in the Amsterdam in their red light district "De Wallen" or like in legal brothels in Las Vegas. this way we guard the workers from abuse by pimps and enforce medical checkups for sex transmitted diseases, we make sure they are paid fairly etc.

speaking of Amsterdam, drugs are not a basic need of people, and should be stopped, but currently we are fighting them in an ineffective way. see the war on drugs again by U.S. Predisent Nixon from 1971 and we know that 50 years later, the U.S.A. today has more drugs than ever.

in fact we know that the drug dealers have so much drugs in their stocks that they themselves keep it from the streets because they want to keep the prices high, they control the supply to

keep the demand high, what an absurd!

of course the war on drugs should be fought with treating addicts for free and supplying them with free drug substitute which doesn't do the drugs damage, putting a lot of money in education for school children and parents, lots of free rehabilitation centers, death penalty to drug dealers because they are mass murderers and so on.

speaking of drug dealers, what Yao said is the classic excuse of drug dealers and any criminal: "if i won't do it someone else will". we can't accept that our moral code sums up to: let's see who's the worst in the world in every field of life and do what they do. not acceptable. we should punish the bad guys and reward the good guys, and fight to be good.

i'm not naive. i know superpowers will still do research and development in CRISPR. they believe that whoever will hold this will hold the power. they don't understand that you can't hold such technologies. these technologies evolve on their own and mutate out of control and slip out of your hand. but at the very least protect it more than your nuclear bombs, because it's more dangerous.

so to sum it up, CRISPR isn't sex and it's not even drugs. it's far worse. we humanity don't want it to be done right, we don't want it to be done at all. we don't want anyone killing us even if they kill us orderly and professionally. WE CAN AND MUST STOP CRISPR.

so in the subject of professional standards, i rule against CRISPR Cas and Gene Drives.

Mister Lao:

cool! so what's out next subject?

MEDICINE AND MEDICATIONS
****

Doctor Yao:

this powerful technology will enable us to cure diseases that we currently can't. we can even prevent diseases before people are born, so they don't suffer. we can protect humanity from infectious diseases that could wipe it out. what if a new disease came and this is our only weapon against it?

we will be able to cure cancer and old age and maybe even give people their ancient dream - eternal life! imagine a world full of bright beautiful and young looking people, who don't suffer from diseases and pain, and live life in perfect health. CRISPR can give us that.

In the Bronze Age and the Iron Age, life expectancy at birth was 26 years. before modern medicine, let's say before 1850 people this average was 30 to 40 years. today it is 71 years. which one of theme do you call natural? would you like to die at a young age?

aren't we happy that Edward Jenner developed the smallpox vaccine? aren't we happy that Louis Pasteur discovered the principles of vaccination and pasteurization, reduced mortality from child-bed fever, and created the first vaccines for rabies and anthrax? aren't we happy that Jonas Salk made the polio vaccine and now children don't have to live in an iron lung?

just like the science of medicine gave us all the vaccines in the past, so today it gives CRISPR which will continue this good trend for humanity.

Mister Lao:

of course i'm happy too that good people invented vaccines, but has nothing to do with GMO and CRISPR CAS Gene Drives. we already talked about how the 19th century science was good and brought us vaccines and the 21st century is bad and brings us self replicating technologies. these are 2 very different technologies. one effects one person at a time and has no bad uses. the other effects a whole species, and will probably find a way to jump between species like today's viruses do, and also has tons of very bad side effects that we talked about.

lets use the logic of the Latin phrase about identifying crime suspects: "Cui bono?" which means in English "to whom is it a benefit?". let's take for example Jonas Salk. when he was asked "Who owns this patent?", Salk replied, "Well, the people I would say. There is no patent. Could you patent the sun?". compare this to all the GMO companies whose sole purpose is to take living things that don't belong to them and patent them, like Monsanto and the farmer Percy Schmeiser case. Bayer, the owner of Monsanto one of the largest pharmaceutical companies in the world.

speaking of Bayer, you don't get this rich by having a conscience and trying to help mankind. during the Holocaust, these people who then were part of a parent company called IG Farben, used slave labor from concentration camps including 30,000 from Auschwitz. one of its subsidiaries supplied the poison gas, Zyklon B, that killed over one million people in gas chambers during the Holocaust in those same concentration camps.

they also purchased humans for dangerous medical testing. speaking of testing on human beings, everything that has to do with CRISPR Cas and especially CRISPR Cas Gene Drives is an experiment on all Earth's inhabitants, because you can stop it from spreading. when you look in Wikipedia in Self-experimentation in medicine, you see the greatest doctors who tried first on themselves: infectious disease (Jesse Lazear: yellow fever, Max von Pettenkofer: cholera), vaccine research and development (Daniel Zagury: AIDS, Tim Friede: Snakebite), cancer (Nicholas Senn, Jean-Louis-Marc Alibert), blood (Karl Landsteiner, William J. Harrington), and pharmacology (Albert Hofmann, and many many others)

i demand that if these companies' owners and CEO's and chief scientists have such a confidence in their products safety, then first let us put them on a deserted island for a year, and let them and their close families be injected with EXACTLY the stuff they want to sell to us. if nothing happens to them and the environment, then i can believe them and relax. remember that video where President Barack Obama pretended to drink Flint water, but the glass of water remained completely full? they should take a dose of their own medicine.

so in conclusion, even if the scientists are naive and want to help society, it's these companies who control both them and the politicians. the companies want only to make money. that's the theory of capitalism. this is why the world looks like it does. i'll give simple examples from other companies that cause human extinction:

if Coca Cola would switch from plastic bottles back to glass bottles; if beef will be heavily

taxed so that a burger cost will reflect it's real price for our priceless jungles; the same goes for oil and gasoline and natural gas, these companies externalize the costs to the planet and cause extinction. if the real cost to society was internalized, no one would buy burgers or polluting cars. and if everybody will buy health food then its price would drop. if everybody will buy electric cars and charge them from solar then these technologies will become advanced and cheap. no need for sophisticated high tech solutions. no need for goodwill of the public. all we need to save the Earth are leaders with conscience. that's it.

by the way most of our dangerous epidemics came from eating animals. if we all go vegan with the help of responsible adults as world leaders instead of what we have now, then most of our diseases like: avian influenza (bird flu), Bovine spongiform encephalopathy (mad cow disease), swine influenza, corona-virus that came from someone eating a bat, and so on. being vegan is almost as tasty and a lot more healthy then eating meat, you can see in that movie "The Game Changers" from 2018.

these pharma companies don't want to cure our cancer. if someone did invent a cure for cancer they would go out of business. by the way in the documentary "The Idiot Cycle" from 2009, you understand the connection between the chemical and GMO companies causing us cancer by pollution etc and they also develop cancer treatments and drugs. they benefit both when making us sick and when "helping" us. this has to stop.

in the documentary "NOVA: Cuba's Cancer Hope", you see that because of the silly embargo, the U.S.A. does not control the medicine in Cuba. so the Cubans invented their own lung cancer vaccine that can help jump-start the body's immune response to cancer. and now some U.S. patients are even defying their country's trade embargo to travel to Cuba for treatment. if someone would invent something like this in the U.S.A., the pharma companies, which are the biotech companies, the same companies we talk about all the time, would choke this research by using their funding or pressuring the institute who made it, and we wouldn't know about it. another way to prevent cancer is by balanced organic food, but the drug companies and even the medical faculties don't teach this, because this will hurt their real business - making money.

the last thing i wish to explain is that CRISPR Cas Gene Drives has a very good chance of creating new diseases of its own, some of them in a whole different league compared to today's worst diseases. i'll give two examples that i can think of, but nature has a much wilder imagination. the first example is a super virus. think of the HIV or AIDS virus, which changes itself. this is called a retro virus and because of that we can't cure it. but now give it the ability not only to change his own RNA but our DNA as well through CRISPR Cas. we can't even begin to imagine what such a virus can do to the body, but it's not good.

the second example is generation skipping sterility. as we know when you breed a horse and a donkey you get a mule which is sterile. what if the Crispr Cas shuffled our genes so we're sterile but this disease was not seen until the next generation? many hereditary diseases skip a generation. so what if it was something very very serious like sterility that skipped? normally such a thing will pass on slowly in the population but with a Crispr Cas Gene Drive we can all get infected and by the time we find out, it will be too late!

Miss Guan:

Lao! i thought you got my hint to keep it short! are you trying to tire your judge to death?

but you're absolutely right. i will not repeat what you said, but i totally agree and i'll just add the bigger picture.

doctor Yao is again promising fantasies, but he doesn't call the shots. in his specific case, thank God for that, because he's an evil geneticist who just manipulates us to promote his technology. but even if a good hearted scientist would come, who really wants to help humanity, he or she doesn't call the shots. the ones who call the shots are the big companies, which means the richest people in the world and they have other plans.

the richest people don't like the poor people and don't care for them. throughout history they used them as production workers and soldiers. but now more and more they have robots to do these roles, so very soon the richest people will no longer need the poor. you have to be super naive to think they would try to prolong the lives of the vast majority of the population which are the poor, especially now that they outstripped the planet and there's shortage in resources food, water, air etc.

another factor to think about and is not politically correct but is correct, is that it's not a good thing to give people very long or eternal life, because they will not let go of power. think about Stalin in the Soviet Union, would you like him to live forever? most countries are not democracies where there is a limit of how long one person can rule. the first ones who will get eternal lives are the most powerful ones, and they will never let go.

and finally two small points that i noted for myself, the first has to do with statistics:

the average length of lifespan that Doctor Yao told us about is a mean. what would happen is a lot of the babies would die, but once someone survived he could have lived until an old age like us. so for most of history a woman would give birth like 10 times, and only 2 or 3 of the babies will survive to adulthood. this also made the healthiest survive and this was normal.

the mean number is also effected by wars for example, the soldiers that fight are young, so you get the false impression that everybody die young, but without the war they could have reached old age. so don't imagine anceint society as if there were no old people.

the other thing i wanted to say is similar to what you said that sometimes our biggest problems can be solved with simple solutions. i'm talking about the Hungarian physician and scientist Ignaz Semmelweis who was called the "saviour of mothers". Semmelweis proposed the practice of washing hands with chlorinated lime solutions in 1847. with this genius but simple idea he succeeded in bringing the rate of deaths of mothers from 30% down to less than 1%.

so in the subject of medicine and medications, i rule against CRISPR Cas and Gene Drives.

Mister Lao:

sorry! i'll try to keep it short next time.

Miss Guan [smiling] :

you'd better! or i will rule that Doctor Yao is the winner! ha ha just kidding! ok our next subject is:

INVASIVE SPECIES
****

Doctor Yao:

with this technology humanity can solve problems that it created like climate change.

for example with global warming, we can stop the upcoming danger of invasive species that take over because of the weather changes. like mosquitos carrying tropical disease into cool places where they never reaced in the past.

Mister Lao:

we already talked about humanity can reverse climate change much more simply, by financial incentives, by internalizing the real cost to the environment into the product. if the plastic for the bottle will cause Coca Cola to pay a lot more taxes, they will use glass and recycle, and so on. with internalized pricing cars will use solar electricity instead of gasoline etc.

so now we'll talk about the importance of balance in an ecological system. a good metaphore is if someone builds a house of cards and we pull out one card and the whole thing collaspes. we know from fossils that mosquitos evolved 46 million years ago. since our species separated from chimpanzees 4 to 7 million years ago, i think it's fair to say that the planet's ecosystem depend on mosquitos more than on humans. so i wouldn't just pull that card out of the house of cards and throw it away.

you can read in Wikipedia in "Mosquito control" there are ways to fight mosquitos with genetics:

* introducing large numbers of sterile males.
* uses a strain that is genetically modified to require the antibiotic tetracycline to develop beyond the larval stage.
* other genetic methods including cytoplasmic incompatibility, chromosomal translocations, sex distortion and gene replacement.
* a gene drive method eradicated small populations of Anopheles gambiae.
* genetic modifications resulting in the OX513A variant to reduce reproduction.
* a fungus with a gene from a spider was inserted into the fungus causing it to produce a neurotoxin.
* "specicide" of thirty mosquito species by introducing a genetic element which can insert itself into another crucial gene, to create recessive "knockout genes".

but in the same article in Wikipedia there are twice as many ways to fight the mosquitos without genetics:

* dry out standing water sources

* releasing a lot of sterilized by radiation insects into the wild
* biocontrol with fish that eat larvae, dragonfly and lizards and other predators
* dead spores of the soil bacterium that interrupt larvae
* fungi that can kill adult mosquitoes
* larva trap where they suffocate
* adult mosquito trap where they dehydrate
* thin layer of oil on top of the water
* contact poisons
* growth regulators
* surface films
* stomach poisons, poisons like DDT, and if they are immune to DDT then malathion, propoxur or lindane. of course all of the poisons very bad to other species and to people too.
* dismantling a protein associated with eggshell organization, factor EOF1.

anyway what i did was to invent a new way to fight the diseases that mosquitos spread...

Miss Guan [amazed] :

come again?!? you invented a system of your own - what a wowzer! how does it work?

Mister Lao [blushing] :

SOLUTION FOR MOSQUITO BORNE DISEASES

ummm... thank you!!! it works in an original way... have you noticed how all these solutions are deadly in one way or another to the mosquito? so my solution is based on keeping the mosquito alive and well, and only killing the disease pathogens inside it.

if you think about it, when you damage the mosquito in anyway, you work against evolution, because any mosquito that survives will carry the genes that allows it to not be killed by you, for example fear of traps and so on.

but if you think about it more, our problem is not with the mosquitos, they are annoying, but what we really want to fight are almost always viruses:

yellow fever virus, dengue fever virus, Zika virus, Japanese encephalitis virus, West Nile virus and so on.

the only exception is Malaria which is a single-celled microorganism of the Plasmodium group.

so what we want to do is to catch the mosquito, reward it by a drop of food or blood so it comes again next time, and in this machine that catches it we do one of 2 things, or both:

method #1 - dialysis filtering that cleans the mosquito's "blood" (hemolymph) from pathogens.

method #2 - cleaning of the mosquito's saliva and proboscis (straw) with high energy beam.

https://en.wikipedia.org/wiki/Sterilization_(microbiology)#Ionizing_radiation_sterilization

the way that a mosquito transmit the disease is by biting a sick person and then biting a healthy person. so if the mosquito will be cleaned between this points in time, the disease will not spread. so we want the mosquito to visit the cleaning machine as frequently as possible. that's why we never harm the mosquito and we always give it a reward in the machine. we will not have less mosquito bites which is the annoying part, but they will no longer spread disease which is the critical part.

insects have a heart and it pumps a fluid that has the same job as blood in us, it's called hemolymph

"How is bug blood different from our own?" by Rob DeSalle in Scientific American March 19, 2001
https://www.scientificamerican.com/article/how-is-bug-blood-differen/

so the machine will tempt the mosquito with a drop of food or blood. we can also attract the mosquito with the smell of CO2 or warmth or whatever attracts the mosquito, but it's important also to reward it so it comes back often.

once the mosquito is inside the machine, we radiate the area of its head with x-ray or electron beam. this messes up the DNA of the virus so it's no longer functional.

the other thing we do is equivalent to what we do with a person kidney failure which is dialysis.

https://en.wikipedia.org/wiki/Dialysis

the different components of the mosquito's "blood" (hemolymph) have different sizes but they are all fixed and known to us. let's say for example that it has 6 materials:

https://en.wikipedia.org/wiki/Hemolymph

(1) water (smallest molecule here - just oxygen and two hydrogens)
(2) inorganic salts (a little bigger like Sodium chloride our table salt)
(3) lipids (bigger contain some "head" and then chains of carbon and hydrogens)
(4) proteins (usually a lot bigger and more complex)
(5) yellow fever virus (virus are made from proteins and other building blocks so they're bigger)

then you have things which are a lot bigger like
(6) Hemocyte (invertebrate immune system cell)
https://en.wikipedia.org/wiki/Hemocyte_(invertebrate_immune_system_cell)

so what we need is a series of chambers. between the chambers we pass the liquid through a semi-permable membrane but with each chamber that we proceed, the holes in the membrane are smaller.

so the first chamber catches the biggest component, and let the others go through. then the next chamber catches the second biggest and so on. if it's better we can use centrifuges for the

same thing, and this will order the components by weight.

once we have all the components seperated we destroy the virus for example with a blast of high energy radiation. then we combine the components back together and inject it back to the insect's body.

passive saliva sterilizer (using electricity from solar power and battery)

we need a tiny amount of nuclear waste, like the types used in medicine which are gamma ray emitters

https://en.wikipedia.org/wiki/Radioactive_waste#Medicine

nuclear waste doesn't cost anything, the problem is the opposite - what to do with it.

since we are talking about tiny amounts there is no risk of someone collecting the bags and building a dirty bomb.

now we need a canister like a "tin can", but made of lead. that's because lead blocks radiation and we want the genitals of the mosquitos not be radiated, only their mouth, because if we radiate the mosquitos reproductive system it can't reproduce.

the top of the canister we close with a lidwhich is also made of lead, it's like the lid of a cooking pot, but made of lead, and matches the size of our canister.

we also drill small holes into the canister, two holes close to the top so that we can tie a string, so that we can hang the canister from a branch of a tree, so that ants can't reach it, but flying mosquitos can.

we tie the tiny amount of radioactive material to the lid from the inside, for example inside a small platic bag, that is tied with a little string to the lid. we drill a small hole in the lid for this.

so now we drill tiny holes all around, close to the bottom of the canister. the holes should be small enough so that when we pour water with sugar into the canister the water doesn't drip, but big enough so that a mosquito can put it's "drinking straw" and suck sugary water.

when the mosquito puts its "drinking straw" into the tiny hole, his mouth is exposed to radiation that cleans his saliva from viruses, because the gamma rays mutates the virus and the virus is too simple to have correction mechanisms, unlike a cell.

every once in a while the people take it down, open the lid, pour some more syrup which is just sugar and water boiled together, into this feeding and sterilization station.

the tiny amount of exposure, very little material over a short time, doesn't do any damage to a creature the size of a human.

active saliva sterilizer (using electricity from solar power and battery)

we do something similar but without radioactive material, instead we make X-rays using electricity.

we make x-rays using a "Crookes tube" this is how Wilhelm Rontgen discovered them in 1895

Crookes tube
https://en.wikipedia.org/wiki/Crookes_tube

but the idea is the same we use lead to stop the x-rays from harming the mosquito's reproductive system, and the short blast of x-rays sterilizes only the mosquito's mouth.

Miss Guan [laughing] :

i'm sorry, i just can't stop thinking of Spider-Man that got his abilities after a bite from a radioactive spider!

Mister Lao [laughing] :

i created a monster - mosquito man! i guess "with great power there must also come great responsibility"!

[they both laugh]

Miss Guan:

you always have good ideas...

mosquito microdialysis

so what about the other method? the dialysis of the mosquito's "blood"? that one sounds more complicated, is it possible?

Mister Lao

i think it's possible. we have the technique of Microdialysis, for example for brain tissue.

https://en.wikipedia.org/wiki/Microdialysis

and Japanese scientists already used it on Tobacco cutworm which is a moth.

Yuji Ikemoto, Satoru Kawaii & Junya Mizutani (1993)
Microdialysis for the Analysis of Insect Haemolymph,
Bioscience, Biotechnology, and Biochemistry,
57:3, 402-404, DOI:10.1271/bbb.57.402

and here is another study that used it on Blattella germanica which is a cockroach.

A microdialysis study of allatostatin degradation in Blattella germanica (L.) (Dictyoptera, Blattellidae)
Enrique Peralta, Lluisa Vilaplana, Nuria Pascual, Cristina Carreno, Maria-Dolors Piulachs, David Andreu, Xavier Belles.
Physiological Entomology (2000) 25, 254-259 doi.org/10.1046/j.1365-3032.2000.00189.x

they even have a photo of the cockroach with the microdialysis.

so i'm pretty sure we can do it with a mosquito.

we don't have time to pump out all the fluids from one mosquito, and then clean them properly, and then pump them back into the mosquito.

so what we should do is sacrifice the first mosquito which dies but buys us time.

we take the fluids from the first mosquito, and then clean them properly and store them. then when the second mosquio comes, we have a clean "blood donation" waiting for him, and the secon mosquito's blood will be used for the third mosquito and so on.

if the volumes of the mosquito's fluids is too small for doing such processes like filtering through membranes or seperating with centrifuges, the machine can dilute it with distilled water after we pump the fluid out of the mosquito, and filter out that same volume of water before we pump the fluid back into the next mosquito.

how do we pin down the insect without hurting it so we can later relese it unharmed?

for this we can use the centrifugal force that water in a bucket experience when you swing thee bucket around and the water is "glued" to the bucket and don't spill like they would normally do.

https://en.wikipedia.org/wiki/Centrifugal_force

the machine will have a small "room" with an open door. the machine puts a small drop of syrup as "bait" to come in. when the insect is inside the door closes. the insect finishes drinking the syrup. then the whole room has a very strong gravity so the insect can't fly and is flat on the floor of the "room". in reality what happens is that the tiny "room" is installed on a rotating arm, and after the door closed and the insect finished drinking, the rotating arm started to rotate the room faster and faster . but the insect only feels strong gravity that "glues" him to the floor without causing him any harm.

inside the room on the ceiling of the room, there is a tiny camera, so that the computer can see where the insect is. the floor of the room has tiny holes drilled into it in regular intervals. imagine a chessboard where in every corner of every square there is a tiny hole.

from the other side of the floor, i mean below the floor and outside of the room, we install a small robotic needle which we inject into the insect through one of the tiny holes, using the camera above the insect, which tells the computer which hole to pick. like a 3D-printer where

the nozzle moves along the x and y axis until it reaches the exact point and then it injects the plastic resin, but here we don't have a nozzle, instead we have a needle.

a more sophisticated design would have higher resolution "chessboard" and two needles, one that can pump out the dirty liquid from one end of the insect, and another that at the same time pumps in the clean liquid into the other end of the insect. this better design is also healthier for the insect.

at the end of the process we pull the needles out of the insect, we slow down the rotation gradually, and we open the door so it can fly free. and we put a drop of syrup for the next insect to come.

Miss Guan [laughing again] :

i'm sorry, now i just can't stop thinking about "Indiana Jones and the Temple of Doom", it's like you combined the "Bug Tunnel" and the "Death Trap" with the spikes!

Mister Lao [laughing] :

"There are two dead people down here!"
"There are gonna be two dead people in here! Hurry!"

[they both laugh]

Miss Guan:

but seriously now, i really think it can save many lives. can someone produce it in a reasonable enough price so that the rich global north will buy many of these machines for the poor global south. and with the climate change this blow will hit rich countries too.

Mister Lao:

thank you!!! i also hope it works and that it will be put into good use, but i'm getting back now to where we started, as the saying goes, we shouldn't use "a sledgehammer to crack a nut". if i can invent 2 methods to solve this, then scientists can use these methods or find better methods, and solve this without genetics.

Miss Guan:

agreed! as the judge i just want to add a few last points.

lately i've been reading a biography of Elon Musk, that's called: "Elon Musk: Tesla, SpaceX, and the Quest for a Fantastic Future".

Mister Lao:

oh Elon Musk, i'm a huge fan of his!

Miss Guan:

me too! did you know that before he started building his own space rockets, he had another idea to inspire humanity to go into space, and that idea was to grow a plant on Mars?

Mister Lao:

no, i didn't... but it sounds cool!

Miss Guan:

wait. [Guan takes a book out of her bag and leafs through it]

here i'll read to you the parts i marked for myself, it starts on page 113:

But, as the discussion wore on, a consensus started to build around pursuing a different project—something called “Mars Oasis.” Under this plan, Musk would buy a rocket and use it to shoot what amounted to a robotic greenhouse to Mars. A group of researchers had already been working on a space-ready growth chamber for plants. The idea was to modify their structure, so that it could open up briefly and suck in some of the Martian regolith, or soil, and then use it to grow a plant, which would in turn produce the first oxygen on Mars. Much to Musk’s liking, this new plan seemed both ostentatious and feasible.

Musk wanted the structure to have a window and a way to send a video feedback to Earth, so that people could watch the plant grow. The group also talked about sending out kits to students around the country who would grow their own plants simultaneously and take notice, for example, that the Martian plant could grow twice as high as its Earth-bound counterpart in the same amount of time. “This concept had been floating around in various forms for a while,” said Dave Bearden, a space industry veteran who attended the meetings. “It would be, yes, there is life on Mars, and we put it there. The hope was that it might turn on a light for thousands of kids that this place is not that hostile. Then they might start thinking, Maybe we should go there.”

Mister Lao:

sounds super cool!

Miss Guan:

i know, but wait. here comes the not so cool part. i'm skipping to the not so cool part:

Then there were the immense engineering challenges that would need solving. “To have a big window on this thing was a real thermal problem,” Bearden said. “You could not keep the container warm enough to keep anything alive.” Scooping Martian soil into the structure seemed not only hard to do physically but also like a flat-out bad idea since the regolith would be toxic. For a while, the scientists debated growing the plant in a nutrient-rich gel instead, but that felt like cheating and like it might undermine the whole point of the endeavor. Even the optimistic moments were awash in unknowns. One scientist found some very resilient mustard seeds and thought they could possibly survive a treated version of the Martian soil. “There was a pretty big downside if the plant didn’t survive,” Bearden said. “You have this dead garden on Mars that ends up giving off the opposite of the intended

effect.”

Miss Guan [closes the book]

by the way Musk was not afraid of all this, project didn't start from another reason, and that was that the russians didn't want to sell him rockets. and they were the only ones he had affordable rockets. then on the plane home Musk made some calculations and figured out he can build rockets himself, so he found another way to inspire people to go to Mars, and so SpaceX was born. but do you see what i mean?

Mister Lao:

that with all the experts we don't even have enough understanding in biology to grow one plant if the conditions are a little different?

Miss Guan:

exactly! we humans talk a lot but when it was time to put our money where our mouth is, when we needed to bet that our knowledge will work we got cold feet. why? because deep down we know that we don't know. these are such complex systems.

here is an example:

it was only a few years ago in 2015, that american scientists discovered that dust from the Saharan desert in Africa fertilizes the rain forest in the Amazon Basin in South America. so if we know so little, how dare we bet in the "Genetic Roulette: The Gamble of Our Lives"? which is the name of the anti-GMO book and documentary by Jeffrey M. Smith.

here another example:

it was only a few years back in 1988, when Edward I. Newman from the University of Bristol in his article

Mycorrhizal Links Between Plants: Their Functioning and Ecological Significance
Advances in Ecological Research
Volume 18, 1988, Pages 243-270

discovered the WOOD wide web! the way trees are speaking with each other, trade food, make friends, warn from danger and much more. all this is done by a network of fungi that grows between in and between the roots of different trees.

watch this beautiful short video by the BBC on Youtube:
How trees secretly talk to each other - BBC News
https://www.youtube.com/watch?v=yWOqeyPIVRo

and the documentaries: Intelligent Trees, and What Trees Talk About.

https://en.wikipedia.org/wiki/Mycorrhizal_network

before this recent discovery, the fungi was considered only a parasite. what if we decided to kill all fungi?

tribal shamans in the Amazon rainforest have accumulated through the generations encyclopedic knowledge about medicinal plants, they respect the forest and protect it. we in turn must protect them and the forest, if not for morality and justice, then because each plant species could bring us medicines and cures that are unknown to us. natural and safe and proved medicines and cures.

the tribal Maori people in the documentary "Unnatural Selection" show a lot of wisdom too. they didn't learn it in fancy universities but from their ancestors by experiencing and feeling nature. when they talk about Whakapapa, they demonstrate an intuitive understand for how interconnected nature is.

so scientists, first prove your understanding by creating an ecosystem for Mars. terraform Mars so it's inhabitable by humans. only then risk collapsing Earth's ecosystem.

systems with so many parts are too complex even for modern science to calculate. it's like the butterfly effect. it's like non-linear equations. we can't predict what will happen.

this is not only about morality and being humble. When you take away the rats for example, their natural enemies die (snakes, bird of prey, cats), then if something like a rat comes back, we are defenseless. Each part of an ecological system is connected to another. For example, if you take out krill, the fish die, then everything that eats fish including us die.
but CRISPR is a lot more dangerous because it's an unstoppable engine of random changes. It makes an unexpected change and then another completely different unexpected change, and again and again, it's like rolling the dice or spinning the roulette endless times, and when you "win" you die. In Russian roulette you have just one spin, but what would happen if you have endless spins? How long until the round enters the chamber?

so in the subject of invasive species, i rule against CRISPR Cas and Gene Drives.

Miss Guan:

ok so our last subject is

ECONOMIC INEQUALITY
****

Doctor Yao:

we must give the CRISPR Cas technology to everyone, we do this by selling cheap CRISPR Cas kits that even the poor can afford. so the poor can make their own CRISPR Cas medicines and enhancements.

if we don't, the gap between rich and poor will grow and grow.

the rich will be able to afford to cure the rich kids genetic diseases and buy genetic

enhancements so they and their future offsprings are born more intellegent and more beautiful and more healthy etc.

the poor will stay as they are today, so while the rich will become super human the poor will be far behind. there will be a master race and a slave race literaly.

Mister Lao:

it's similar to what the old New Zealand called: "false urgency" and "false lack of options".

what we have here is called "false dilemma". Doctor Yao tries to convince us that there are only 2 options: either everybody has CRISPR Cas - or - only the rich people have CRISPR Cas. but this is not true. he "forgot" the third option: that nobody will have CRISPR Cas.

remember we talked about it as a preliminary question, can the world (the superpowers) really stop the CRISPR Cas or is all this just an academic debate with philosophic value only. we compared bio-weapons to cyber-weapons and arrived at a very practical conclusion, that the world actually can stop CRISPR Cas!

after we established that indeed we could stop CRISPR Cas, then we did all this debate on whether we should stop CRISPR Cas. and since we arrived at the conclusion that we definitly should stop CRISPR Cas, this is our third option: nobody will have CRISPR Cas.

this is our best option. in this option, there are no masters and no slaves, just human beings.

Miss Guan:

i agree with you Lao. as the judge, i'll elaborate on just one point which i think is the most important of all:

in the documentary Josiah Zayner said: "how do we help it so that everybody can get these edits? What are we left with? We're left with a lot of athletic, attractive, healthy people? Whoo, that's gonna be a terrible world."

people like to hear that, because it's not fun to hear pesimistic people describing dystopia; it's much more fun to hear optimistic people describing utopia. but we don't have that luxury. we have to analyze rationally not emotionally and come to the inevitable conclusion that Josiah Zayner is telling us a lie.

let's think about arms races that we know. in geopolitics: is the nuclear arms races between superpowers leading to a good thing? of course not. it would be much better to agree between us not to race, i will have less bombs, you will have less bombs. better for everybody.

in nature let's take the Peacock tail. male peacocks made an evolutionary arms race with each other to impress the females, and now their tails are so long they can't fly and can't escape predators. is this leading to a good thing? of course not. it would be much better for the birds to agree between them not to race, i will have a shorter tail, you would have a shorter tail. better for everybody.

let's take human females with silicone breast implants. with bigger and bigger boobs. is this leading to a good thing? of course not. it would be much better if they could agree...

the last example also demonstrates that humans don't choose to make themselves better, like have more compassionate and tolerant character, be more altruistic and kind etc. humans choose to make themselves higher in their stupid hierarchy even by cheating. so if they will all become more intelligent, it will not be a better world. we will trade a dog eat dog world with a superdog eat superdog world. they want to beat each other. they want a situation of i win and you lose. this is called win-lose in game theory,

all the situations we mentioned are described by a simple game called "the prisoner dillema". two people who can't trust each other, if they cooperated they will have WIN-WIN, but they are afraid that the other side will betray them which is LOSE-WIN, so they are betraying the other side first, hoping to beat him WIN-LOSE, but since they both betray each other, the total result is LOSE LOSE.

what if we could cooperate about CRISPR? all we have to do for this is understand the simple fact that a LOSE-WIN (the other side beat us) is just as bad as LOSE-LOSE. because it's not like the case where they nuked us and they continue to live normally. and it's not like the case where they impressed their mate with their big tail or tits and passed their genes and our genes died with us.

it's a DIFFERENT case because if the secrets of how to make bio-weapons are out in the open, in a short time someone will develop them further and kill everyone. like the bad guy said in the movie Leon the professional: "EVERYONE!!!!"

i repeat - this time WIN-WIN is the only good result. WIN-LOSE is a bad result. why? because if we beat the other country, it's just a matter of a short time, before this CRISPR will come back to hount us. this technology has a "will" of its own. you can NOT control this technology. guaranteed 100%. with genetic engineering WIN-LOSE = LOSE-WIN = LOSE-LOSE. period.

so in the subject of economic inequality, i rule against CRISPR Cas and Gene Drives.

Miss Guan:

so as the judge i will now announce my final verdict - Lao is the winner! CRISPR Cas is bad and Gene Drive is bad!!!

Mister Lao:

thank you!!! may i finish with one last "speech" about a small issue, a quote of one of the greatest people ever - Charles Darwin - which this documentary took completely out of context?

Miss Guan [smiling] :

sure. this is your prize as the winner!

Mister Lao [smiling] :

that's the prize? i was hoping for something more... like... a hug!

[Guan gets up and comes and sits next to Lao, and she gives him a big hug and a kiss on the chick]

Mister Lao [smiling from ear to ear] :

wow! it pays to be a winner!

Miss Guan [smiling] :

it pays to be a good person. at least when you're dealing with good people.

Mister Lao [blushing and Guan gets it and smiles] :

so the out of context quote is

"if our poor and our sick suffer not because of nature, but because of our institutions, great is our sin."

first of all, the original quote from Darwin's "The Voyage of the Beagle" goes like this:

It is often attempted to palliate slavery by comparing the state of slaves with our poorer countrymen : if the misery of our poor be caused not by the laws of nature, but by our institutions, great is our sin ; but how this bears on slavery, I cannot see ; as well might the use of the thumb-screw be defended in one land, by showing that men in another land suffered from some dreadful disease.

Darwin doesn't mention sick people. But if only this was the problem; Oh no, Zayner as master of manipulation really works his twisted talent in ripping this quote out of context and forcing it to serve Zayner's dark purpose:

Darwin saw cruel atrocities done to the black slaves in Brazil. Darwin was rightfully appalled. The slaves' owner said that the poor people in England suffer just as much. In essence the slave owners accuse Darwin of being a hypocrite.

Is Darwin a hypocrite?

On the personal level Darwin is not hypocrite because his grandfathers Erasmus Darwin and Josiah Wedgwood were both prominent abolitionists.

Also here is a passage from THE AUTOBIOGRAPHY OF CHARLES DARWIN page 51:

By the way, a negro lived in Edinburgh, who had travelled with Waterton and gained his livelihood by stuffing birds, which he did excellently; he gave me lessons for payment, and I used often to sit with him, for he was a very pleasant and intelligent man.

Is Darwin a hypocrite on the national level?

By the time Darwin came back there was no more official slavery in the British Empire. But Darwin is not denying that there is injustice towards the poor. There was a big division between employers and workers, between rich and poor. Darwin asks himself who's fault is it? Is it the nature of the poor themselves (are they stupid and lazy by nature for example)? Or is it the fault of the financial institutions of the rich people, that keep the poor poor forever? Darwin does not give an answer, but he is not running away from responsibility. Darwin says that is the current situation is not the fault of the poor but the fault of the rich, then great is our sin.

Then Darwin explains that if this is indeed the case (class struggle in England) this doesn't justify slavery.

First of all because it's very different by degree:

In slavery there is corporal punishment and sexual abuse and the slave is practically the property of the master to the point that the master can torture him or her to death. The slave owner can and does separate families and sell them to the highest bidder etc. No one can do this to the poor people in England.

and second of all because it's not the same type of problem:

The British Empire made a lot of money from African slaves (e.g. Jamaica) and Britain itself stopped it. The hierarchy between people (which exists also in animals) is a lot harder to solve if at all possible. There is a clear distinction between the two problems. One is about people from the same country who are protected by law, and have the right to choose to quit and go work somewhere else. The other is about kidnapping people from another country by force beating them and treating them as objects (selling, abusing, killing).

In summary: One bad thing cannot justify another one, and especially a moderately bad thing cannot justify an extremely bad thing.

Now back to Zayner. What is the situation in our case?

The poor does not suffer by the institutions, the FDA and so on (if they are doing their job) are trying to prevent a disaster brought by Zayner and his friends to all people: poor and rich. In fact, it makes sense that if anyone can escape the disasters caused by no edible food etc., brought by Zayner, then it would be the rich. If or more accurately when Zayner's irresponsibility would bring a global illness, again the rich stand a better chance of surviving. Zayner is playing the card of "we the little people" against "the big bad government" triggering the historical American fear from "Big Brother" but in fact the greatest risk comes from the likes of Zayner happily supplying fanatic terrorists or corrupt businessmen with toolkits of doom.

So for those who have just tuned in:
In Darwin's case the institutions were bad; in Zayner's case the institutions are good. WE NEED A LOT MORE REGULATION.
In Darwin's case the sin was class hierarchy (a natural if unfortunate phenomenon); in Zayner's case the so called "sin" is NOT using CRISPR (CRISPR is totally unnatural and very dangerous).
In Darwin's case he cares about other people and blames himself; in Zayner's case he cares

about himself and falsely blames other people.
In Zayner's mind he is Robin Hood. Taking from the rich, giving to the poor. In my mind Zayner is the apprentice in The Sorcerer's Apprentice. But in the real world, there is no way to breaks the spell, for example Zayner cannot undo an epidemic. Let us all listen to Goethe's poem: only a master should invoke powerful spirits. CRISPR is a super powerful spirit, and scientists today are a far cry from being masters at genetics.

Miss Guan:

you're 100 percent right, and this was just an example of one of the biggest difficulties we face: how easy it is for the bad guys to drop a lie, and how hard the good guys have to work just to find out and prove the truth.

take the average person on the street: the bad guys give him a short and catchy explanation that he "gets". the good guys give a long and elaborate explanation because real science is hard. the average person doesn't get it (in the best case) or suspects it's a lie because it doesn't make sense to him (in the worst case).

how can this person vote later for the right leader to do the right thing?

Lao and Guan together (in desperation) :
HOW MUCH WORSE CAN IT BE?

[Guan gently puts her head back on Lao's shoulder, and Lao gently rests his head on Guan's head.
They both fall asleep and dream and the lights go dark. This is the end of part three of the musical]

PART 4

Suppertime

https://www.youtube.com/watch?v=Ayd7eytYVh8

https://www.facebook.com/littlelabofhorrors/videos/683020232535356

[Slime Mod]

so far the mutation system

produced a whole organism

but now each single cell

can make the others unwell

if their defense ain't sublime

i think it's suppertime

Intelligence whence you got

vision then movement then thought

But any arms race will do

toxins and antidotes too

And if a cell not the prime

All set for suppertime

come on, come on,

think about all the benefits

come on, come on,

if a cell "knows" bio-chemistry

come on, come on,

given pressure and iterations

come on, I swear on all my spores

intelligence comes from wars

[Chang âáøú , Feng âáøú , Lei âáøú]

Come on, come on. Come on, come on.

Come on, come on. It's suppertime. It's suppertime.

Come on, come on. Come on, come on.

Come on, come on. It's suppertime.

It's suppertime. Suppertime.

[Slime Mod]

the slime forms in this way

computer of DNA

yes its processing is slow

massively parallel though

computing race for who's prime

I think it's suppertime

For exoskeleton most

just take control of their host

they tap your brain and your spine

now your control is mine

more humans taken by slime

All set for suppertime

Come on, come on,

Think about all the abilities

Come on, come on,

merge with a super computer

Come on, come on,

Ain't no time to turn squeamish

Come on, I swear on all my spores,

When humans gone the world will be yours, yours

[Chang âáøú , Feng âáøú , Lei âáøú]

Come on, come on. Come on, come on.

Come on, come on. It's suppertime. It's suppertime.

Come on, come on. Come on, come on.

Come on, come on. It's suppertime.

It's suppertime. Suppertime.

(a dream within a dream within a dream)

Military Bunker of the People's Liberation Army Special Operations Forces.

right now it's the HQ (Headquarters) for a classified operation of the elite unit "Sea Dragon" on an unmapped island.

the characters monitor the action by sitting in front their stations of the Command and Control (C2) system, except Yao who is on the island.

https://en.wikipedia.org/wiki/Command_and_control

Yao's unit parachuted into the sea near the island and scuba dived using rebreathers from there. they are all armed with carbine (shortened) version of the new assault rifle QBZ-191 mounted with under-barrel grenade launcher. they are equipped with night-vision goggles. their tactical helmet cameras broadcast live video stream of the action to the HQ bunker.

Colonel Kong - chief of the Special Operations Forces.
sergeant Lao - hacker on loan from PLA Unit 61398
officer Guan - intelligence officer
Slime Mod - the enemy - super intelligent monster
major Yao - trigger-happy leader of operation

Greek chorus - watchstanders at their stations.

Miss Chang:

Power 3 means: engineered diversification and human choice.

people have no idea what are the properties of the creature that they created.

for example someone tries to solve the plastic pollution by creating a microbe that eats plastic.

at first the microbe eats only plastic which is made of oil which is organic material.

or another example: one country makes a bio-weapon microbe to deplete the energy - oil or gas reserves - of an enemy country.

in any case, then the microbe changes a bit and it now eats all kinds of organic material: plants, animals and people. a super flesh-eating bacteria!

Miss Feng:

Power 4 means: engineered diversification and organic choice.

engineered organisms escape into nature, multiply in massive amounts, and compete with the naturals organisms. soon the engineered creatures outcompete the natural creatures. then a fast evelutionary arms race starts between the engineered creatures and themselves.
the inevitable result of such an arms race is superintelligence.

we are familiar with our case where evolution happened first with sight and then movement and then thought. that's why we're scared of creating super supervillains that have superhuman skills that supersede our own.

but it doesn't have to be this way. an arms race can be for example between creating toxins and creating antidotes; an arms race can be for example between developing offensive viruses and developing defensive viruses; an arms race can be over which creature gain control over energy resources. in fact any arms race will eventually reward and augment intelligence.

the name of this superintelligence is "Slime Mod", a portmanteau word of slime mold and mod :

https://en.wikipedia.org/wiki/Slime_mold

https://en.wikipedia.org/wiki/Modding

Miss Lei:

Power 5 means: engineered diversification and engineered choice.

once the super intelligence is created, it directs its own evolutionary direction, and improves itself endlessly.

this ends with the super-intelligence using the genes of the "zombie-ant fungus",

https://en.wikipedia.org/wiki/Ophiocordyceps_unilateralis

in order to make humanity terminate itself. this is done by turning all the people into psychopathic terrorists. to avoid the early detection of this on time by humanity, the super-intelligence introduces a trigger mechanism which activates this behavior. then the super-intelligence activates the change all across the globe all at once.

[sergeant Lao hacks a private communication channel from his headset to officer Guan's headset, so they can talk and the others can't listen.]

sergeant Lao [waving discretely to Guan] :

Guan what's up?

officer Guan [happily surprised but manage to stay discrete] :

Lao! it's so good to see you. what are you doing here?

sergeant Lao:

i'm trying to be the command post of a clandestine operation.

officer Guan:

no, silly! i mean here here. do you work in the special forces?

sergeant Lao:

no, you know me, i can't run around my block... i'm from cyber warfare on loan from PLA Unit 61398.

officer Guan:

cool! i'm Special operations intelligence officer, so it's my job to tell Colonel Kong what's up.

Colonel Kong:

what's our status?

officer Guan:

they just made landfall on the beach, Sir.

Colonel Kong:

good, secure the facility, do not go in yet. understood?

officer Guan:

yes Sir. secure perimeter and await orders.

officer Guan [after relaying the orders to the ground crew] :

Lao?

sergeant Lao:

yes?

officer Guan:

so in this channel only you can hear me?

sergeant Lao:

afformative.

officer Guan:

cool. it's useful that you're a hacker.

sergeant Lao [chuckles] :

i know... so how have you been? remember i asked you for a date in high school and then your family moved to Beijing.

officer Guan:

of course i remember. i was really sad for this. my dad was also in intel community and we moved a lot.

sergeant Lao:

so do you have someone these days?

officer Guan [frown]:

actually yes.

sergeant Lao:

you don't sound too happy about it.

officer Guan:

well you see video feed number one? that's him.

sergeant Lao [surprised] :

major Yao is your boyfriend?

officer Guan:

yes. he's also a major asshole.

sergeant Lao [surprised] :

then why don't you break up with him?

Colonel Kong:

do they detect any movement?

officer Guan:

no Sir. there's no sign of life there.

Colonel Kong:

god damnit, our top secret experiment on slime mold in our most heavily guarded genetics facility, and suddenly they're all just gone? it's an island they couldn't go anywhere. get inside now and find someone!

sergeant Lao [in Guan's ears] :

or something... Guan i have to talk to you.

officer Guan [talks in the open channel by mistake] :

not now.

Colonel Kong:

Guan! i want them to break in and unfuck whatever happened there. right now.

officer Guan:

of course Sir. i just meant maybe we should deploy the Perdix first.

[
Perdix are autonomous artificially intelligent micro-drones for unmanned aerial surveillance, that can communicate with each other.
each individual drone is not controlled in itself but instead it shares a collective, distributed "brain," travelling in leaderless "swarms," members of which can adapt to changes in drone numbers and remain co-ordinated with their counterparts.

https://en.wikipedia.org/wiki/Perdix_(drone)
]

Colonel Kong [thinking for a moment] :

you're right, we need eyes in there first. get the micro-drones swarm inside.

officer Guan:

Yes Sir. Sir, would you like direct comm with Major Yao?

Colonel Kong [thinking for a moment] :

good idea. no time for "chinese whispers". also give me the micro-drones POV on the main screen, and Yao's POV on the secondary.

officer Guan [re-routing the audio and the video] :

copy that, Sir.

Colonel Kong [now speaking directly to the team] :

Little Dragon do you read me?

Major Yao:

roger that Papa Dragon, i read you loud and clear.

Colonel Kong:

ok listen up real close...

[from this point on we lose interest in the main action, and the "light" shifts to Guan and Lao's conversation which is in the private channel]

officer Guan [pissed off] :

Lao you idiot! you saw what happened. we're in the middle of an operation!

sergeant Lao:

i know that's just it. i found information that's critical for the mission!

officer Guan:

ok but make it brief. what's so important?

sergeant Lao:

do you know what Slime Mold is?

[https://en.wikipedia.org/wiki/Slime_mold]

officer Guan:

yes it's that disgusting yellow fungus that looks like dog vomit.

[https://en.wikipedia.org/wiki/Fuligo_septica]

sergeant Lao:

more or less. but unlike fungus it has the ability to "think" and solve problems.

officer Guan:

Lao get real, it's a one celled organism. it doesn't have a brain. what problems can it solve?

sergeant Lao:

no, i'm serious. it can find the shortest path through a maze like labyrinth to find food. in 2010 scientists also took a map of the Tokyo area, and put small pieces of food where the towns are, and then the slime mold found the most optimal path between the "cities", which was very similar to the path of the railway system that took experts and computers to calculate!

[
Can Slime Mould Solve Mazes? | Earth Lab by BBC Earth Lab
https://www.youtube.com/watch?v=HyzT5b0tNtk
]

officer Guan:

and this is relevant to our current mission because...?

sergeant Lao:

because that's the top secret project they ran on the unmapped island! i hacked into the encrypted video blog of the leading scientist there - we'll call him Dr. X . his video blog chronicles how he evolved the slime mold into a super intelligence! he named this creature "slime mod" which is a compound word of "slime mold" and "mod". mod means modify, like hacking something to have a new ability that it didn't have originally.

officer Guan:

so your theory is that this harmless goo that moves 1 millimetre per hour, overcame a whole military facility filled with brilliant scientists and trained fighters who protect them?

sergeant Lao:

i can explain eveything. just give me 5 minutes. please! for old times sake...

officer Guan [looks at him with disbelief and exhales] :

ok... for old times sake. the Colonel is on top of the situation anyway. shoot.

sergeant Lao:

thank you!

first just moment a minimal background:

there's this guy Andrew Adamatzky. he's a Professor in Unconventional Computing, who appeared recently in the documentaries "The Creeping Garden" and "Le Blob". these documentaries draw connections between slime mold and the science fiction movies Phase IV, Invasion of the Body Snatchers, and The Blob.

in his book "Physarum Machines: Computers from Slime Mould" and his articles he explains how slime mold is "ideal substrate for future and emerging bio-computing devices" and that it "can be made to form logic gates". up until now, other scientists couldn't verify this, but they did use slime mold in a USB sensor, and to control a robot.

Professor Andrew Adamatzky's fed the slime mold with Valerian root.

i even saw a video that slime mold can be used a component of a conventional computer.

[
Living Computer Created With Slime Mold? by Seeker
https://www.youtube.com/watch?v=HKZ2LtfDrmg
]

officer Guan:

ok let's assume it's possible to make a computer from slime mold. so you suspect that Dr. X succeeded to actually build such a biological computer in real life?

sergeant Lao:

i suspect something much more sinister has come to path. i will now tell you what i saw in Dr X's video blog.

Dr. X based his work on previous research from recent years:

one research showed that slime mold can solve an optimization problem that is called "multi armed bandits", which is hard even for artificial intelligence. it's a kind of exploration versus exploitation problem, should you invest in exploring new options, or should you use over and over the best option you currently have.

[
the first ten minutes are without math:

RL 1: Multi-armed Bandits 1 by AI Talks - Rituraj Kaushik
https://www.youtube.com/watch?v=_XsIv-35c6o
]

slime mold can solve this problem!

[
Decision-making without a brain: how an amoeboid organism solves the two-armed bandit
https://royalsocietypublishing.org/doi/10.1098/rsif.2016.0030
]

another 2 problems are the computing the shortest path problem, and the Steiner Tree problem.

[
Maths Problem: Connect the towns solution (Motorway Problem) by singingbanana
https://www.youtube.com/watch?v=dAyDi1aa40E
]

scientists made a model by writing differential equations that emulate the way the slime mold works, and proved that the slime mold can solve both of these problems! - but only in theory.

[
Physarum Can Compute Shortest Paths:Convergence Proofs and Complexity Bounds
https://web.archive.org/web/20170813010009/http://wwwmayr.in.tum.de/konferenzen/Ferienakademie14/literature/BBDKM13.pdf

On the Solution of the Steiner Tree NP-Hard Problemvia Physarum BioNetwork
https://bwn.ece.gatech.edu/papers/2015/j8.pdf

]

officer Guan:

why only in theory?

sergeant Lao:

according to Wikipedia:

"currently these models do not make sense biologically, as they for example assume energy conservation inside the slime mold. Organisms consume food, so energy cannot be conserved."

i know this is not much of an explanation, so we get more clues from this book

Foraging-Inspired Optimisation Algorithms
By Anthony Brabazon, Seán McGarraghy

which on page 309 refers to this paper

An Improved Physarum polycephalum Algorithm for the Shortest Path Problem
https://www.hindawi.com/journals/tswj/2014/487069/

"During the actual expanding process of Physarum, it needs to consume energy to expand its tubes. At the same time, its tubes can absorb energy from the surrounding environment. As a result, there is a trade-off between the consumption and the absorption of the energy.

...

The maintenance of the tubes in Physarum
polycephalum model needs to consume energy while this
energy comes from the flowing nutrients in the tubes. When
the obtained energy is greater than the consumed energy,
these tubes become coarser and the conductivity increases.
Otherwise these tubes will vanish.

...

Through a series of change associated with energy,
flux, and tube, the Physarum polycephalum tends to converge
to a steady state.

...

Here, in order to satisfy the law of conservation of
energy, we assume that the total energy provided by the
flux beginning from the starting node to the ending node is

constant and has nothing to do with the path."

officer Guan:

i don't understand.

sergeant Lao:

this is where we pass from biology to physics, a conservative force performs the same total work when it moves a particle between two points, no matter in what path it moves.

so now back to biology, Dr. X wanted something that does this "maintenance of the tubes" for the slime mold. something that will make a long path just as easy as a short path. he wanted another creature that will supply the energy along the tubes of the slime mold.
does this remind you of something?

officer Guan:

i know that inside every cell in our body we have many mitochondria which turns sugar into energy. right? these little things are "the powerhouse of the cell". and i know that these things started out as an independent creature outside of the cell, and then one day billions of years ago one cell swallowed one mitochondrion but did not eat it, instead the cell opened a partnership with the mitochondrion. and this symbiotic merger was called "perhaps the most important and dramatic event in the history of life" and it was discovered by professor Lynn Margulis.

sergeant Lao:

wow! i didn't know all that! i had in mind a silly example of a vine climbing on a tree. your example is much better. so yes, Dr. X decided to give the slime mold a partner, but this part is really horrible, i don't want to shock you.

officer Guan:

Lao!

sergeant Lao:

ok... the partner was himself. Dr. X's blood vessels was to be the tree for the slime's vine. and his blood will supply nutrients and energy to the slime mold that will grow inside Dr X.

officer Guan:

Eww! i think i'm about to throw up... is it even possible? i mean doesn't the slime mold need air? and can the slime mold eat human blood?

sergeant Lao:

well Dr. X grew it in his lungs which are warm moist and dark just like the slime mold like it. the smaller and smaller bifurcating air passages inside our two lungs create a fractal structure with the combined surface area of a singles tennis court! this means a lot of capilary blood vessels for the slime mold to latch onto and suck from. in preperation for hosting the slime mold in his lung, Dr X. made the slime mold gradually accustomed to human blood. the slime mold can be made to develop "a taste" to things even if it doesn't like like them at first. and then the slime mold passes the knowlege to the slime mold's "offsprings"

What Has No Brain, 720 Sexes, And the Ability to Self-Heal?! by Seeker
https://www.youtube.com/watch?v=sZhc8R58R7k

another thing is that the slime mold really needs calcium and guess what we humans have in our bones.

This Pulsating Slime Mold Comes in Peace (ft. It's Okay to Be Smart) | Deep Look by PBS Deep Look
https://www.youtube.com/watch?v=Nx3Uu1hfl6Q

the slime mold uses the calcium for the pulsating, it's like our muscles contract. this is also how it calculates things, by "relaxing" its muscles.

[
What is Slime Mold and is it Intelligent? World Science Festival
https://www.youtube.com/watch?v=sEX3F2h8cjA
]

officer Guan:

for fuck's sake! how did he get this disgusting thing into his lungs? don't the body protect itself from spores?

sergeant Lao:

it seems he injected the plasma form directly into the lung through his chest.

officer Guan:

this is getting creepier by the minute... didn't he die? i mean from a "collapsed lung"?

sergeant Lao:

i don't know. from this point on there's nothing on Dr. X's video blog, i saw in one of his emails that another scientist said that overnight Dr. X turned from a decent person into a maniac like something has gotten into him. this is our only clue, so i can only guess what happened. how the events unfolded so that in an entire facility we can't find someone who is alive, but if i'm right, then we will find something which is very much live...

officer Guan:

i'm afraid to ask... but... what do you think happened?

sergeant Lao:

from now on i will call this monster in the name that its creator Dr X called it - "Slime Mod" - because it now evolved inside Dr X and has a mind of its own.

so the Slime Mod gets more and more intelligent in the protected and resource abundant environment which is inside Dr X. although the Slime Mod uses Dr X, the Slime Mod sees human beings as a threat. it's objective now is to kill all humans in the world. right now the Slime Mod's "world" is the facility. it's not aware that there is an external world outside the facility with many more people.

officer Guan:

the Slime Mod engineers a deadly weapon like a chemical or biological weapon that kills everybody in the facility?

sergeant Lao:

i don't think so, because it's a military biological facility they are prepared for contamination and quarantine procedures, and this wouldn't have succeeded.

officer Guan:

so the Slime Mod infects whole the people on the island and turns them into crazy zombies that kill and eat each other?

sergeant Lao:

i think you're in the right direction. they all killed each other. but the zombies that we see in the zombie films are dumb and use brute force. i think the Slime Mod had something more subtle in mind.

officer Guan:

so they made them become cold blooded killers like psychopathic terrorists?

sergeant Lao:

exactly! just like a zombie ant fungus, which happens not just in ants. many insects have their own specialized fungus. so the Slime Mod specializes in humans.

Cordyceps: attack of the killer fungi - Planet Earth Attenborough BBC wildlife BBC Studios
https://www.youtube.com/watch?v=XuKjBIBBAL8

https://en.wikipedia.org/wiki/Cordyceps

officer Guan:

but you the zombie ant fungus directs the ant to do a relatively simple behavior. walk up as high as you can on a tree, so the wind will later carry the spores far, and then lock your jaws into the tree and die. how can the Slime Mod create such a complicated behavior as "become a psychopathic terrorist"?

sergeant Lao:

there are many parasites that cause complex behavior changes.

https://en.wikipedia.org/wiki/Apocephalus_borealis

https://en.wikipedia.org/wiki/Category:Suicide-inducing_parasitism

https://en.wikipedia.org/wiki/Behavior-altering_parasite

for example there is a parasite called "Toxoplasma gondii" which cause carelessness in mice which makes the mouse more likely to be hunted by a cat, because the parasite wants to get to its definitive host which is the cat. normally a mouse is afraid of the smell of cat's urine, but the parasite causes the mouse to be attracted to this smell.

there are those who say that this parasite also make humans go crazy. this might explain the "crazy cat-lady" syndrome. maybe these old ladies who feed a lot cats are infected by this parasite and like their smell?

https://en.wikipedia.org/wiki/Toxoplasmosis#%22Crazy_cat-lady%22

some of the effects are much worse like mental problems and tendency to suicide. see in this video

How Parasites Commandeer and Change Our Neurocircuits | Kathleen McAuliffe by Big Think
https://www.youtube.com/watch?v=QhWsDBd7q5M

and we also know that physical damage to the brain can change the person's character. make him from a good person to a bad person. like in the case of Phineas Gage.

https://en.wikipedia.org/wiki/Phineas_Gage

The Man With a Hole in His Brain by PBS BrainCraft
https://www.youtube.com/watch?v=ZKaDWu2zFG0

so i think it's reasonable to assume that we have a conscience center in our brain, and if someone knows our brain from the inside like the Slime Mod does, they can shut that center off. this will turn a normal empathic person who feels what the other people are feeling and identifies with their feelings, into someone who doesn't care if people suffer or die.

stimulate this person's amygdala - the part that controls fear anxiety and aggression

https://en.wikipedia.org/wiki/Amygdala

and you got yourself someone who is cold blooded, violent, and paranoid that the others want to kill him. in short you got a psycho killer.

officer Guan:

holy shit... a whole facility filled with serial killers on the loose! we have to warn Yao and his soldiers!

sergeant Lao:

but remember that now there's nobody left alive. this means that the Slime Mod is the only living thing inside that building. but something much more deadly is about to come.

officer Guan:

you mean it can get worse?

sergeant Lao:

first of all yes, once a super intelligence is reached it increases itself through self improvement in exponential rate. but that's not what i meant.

remember when we said that at first the Slime Mod didn't know about the outside world? well now it does. now the Slime Mod's top priority is to get out of the island, reach the outside world and wipe out all of humanity.

the Slime Mod will spread up the ranks of the military hierarchy. the Slime Mod will take over Major Yao and from him move to Colonel Kong and so on, all the way up to the commander in chief and China's President who has the authority to activate weapons of mass destruction. it starts a global thermonuclear war between the superpowers and so the Slime Mod achieves its goal to kill all human beings on Earth.

officer Guan:

oh no! fuck! we just supplied the Slime Mod with the means to get here. it will get inside Yao and his men. like a smuggler uses a courier or a "drug mule"...

Colonel Kong:

Guan! stop whatever you're doing, we're going in.

officer Guan [approaching the Colonel Kong] :

Sir, i have to talk to you, we must stop the operation immediately.

Colonel Kong:

i know Major Lao and you are a couple, woman, but get a hold of yourself!

officer Guan:

no Sir, it's not that, i just recieved new information that...

Colonel Kong:

officer! get the fuck of the war room. that's an order!

[from here on out Officer Guan is stuck alone outside the bunker. she connects the battery back into her cellphone. meanwhilte sergeant Lao finds a way to transmit the audio from the war room through his station to Guan's cell phone. suddenly Guan's phone doesn't ring but she hears Lao's voice calling her from the device. from now on whenever Sergeant Lao speaks, only officer Guan can hear him and vice versa.]

sergeant Lao:

Guan? Guan? can you hear me?

officer Guan:

Lao! it's you... but how?

sergeant Lao:

the satellite broadcasts the audio to Major Yao, so it would be a discrimination not to broadcast to his girlfriend. i managed to relay to you all our audio streams but couldn't get you any video streams.

officer Guan [chuckles] :

thanks Lao you're the best! i don't know what i'm doing with that Major Asshole Yao! tell me what you guys see on the screen...

sergeant Lao:

they are in biohazard protocol, so they're all waring blue suits.

https://en.wikipedia.org/wiki/Positive_pressure_personnel_suit

Yao got in first, we see his helmet video stream. it's like he's walking through a jungle of Liana vines in the rain forest, but the vines are pulsating, throbbing, and have a glossy yellow color. he uses a Camillus Kukri Machete and you can see the yellow vines bleeds yellow goo each time he cuts one.

in the background we can hear the eerie croon of the Slime Mod interfaced through the facility's public address system

Slime mould_ Day one by INTERSPECIFICS (Emmanuel Anguiano, Leslie García, Paloma López, Felipe

Rebolledo, Thiago Hersan)

https://soundcloud.com/lessnullvoid/slime-mould-day-one

https://www.smithsonianmag.com/smart-news/machine-makes-music-slime-mold-180956864/

Colonel Kong:

what do you make of it Little Dragon?

sergeant Lao:

he's walking inside a huge brain made of Slime Mod.

Major Yao:

Papa Dragon i've never seen anything like it. hold on... there's a yellow dummy here.

Major Yao [approaces a yellow blob that is wrapped in uniform. he pokes it with his machete. it's feels like the blade touched snot, and it leaves a slimey residue on the blade.]

shit... it was a body. but there's nothing left.

sergeant Lao:

there are vines of Slime Mod growing out from each body into other bodies, like a scaled up version of the oats meal pieces in the agar petri dish.

Colonel Kong:

what the fuck happened? did that yellow stuff killed them? did an enemy force broke in? a sleeper agent from inside? an ideological terrorist? a lone wolf massacre?

sergeant Lao:

there are bullet holes in the walls from the security guards shots and traces of poison and corrosive chemicals used by the scientists. everywhere there is shattered glass and broken walls from the grenades of the uniforms and the Improvised Explosive Devices (IED) of the white lab coats. now these clothes are all that remained.

Major Yao:

it's not the yellow stuff Sir, the yellow stuff came after they died, like maggots. these people did it to each other. it's like paintball in slayer or individual elimination mode only for real. each one of them was trying to kill everybody else.

Colonel Kong:

so you're saying that they all feared each other. that's a start. what can make adult people so scared?

Major Yao:

Sir, maybe it's like "nitrous" or "nitrous oxide" the gas they use in illegal car races. the same gas is used by dentists where it's called "laughing gas" and causes euphoria when you breath it. so maybe someone attacked them with another gas that causes mass hysteria?

Colonel Kong:

no way. if we had such a gas, we wouldn't need an army. we would just spray it on the enemy and they would kill each other. there is something called "excited delirium" when you use drugs like cocaine or methamphetamine for a long time. but then no way all these people flipped at the same time. another possibility is when you get someone addicted for example to benzos which are tranquilizers like "xanax" or "klonopin" or "valium" and suddenly stop it. but doping a whole facility without us knowing it would require such an elaborate operation that whoever did it can much more easily poison them.

https://en.wikipedia.org/wiki/Benzodiazepine_withdrawal_syndrome

Major Yao:

Sir, maybe someone brainwashed them with subliminal messages, like for example what happened in the Havana syndrome where they heard unexplained voices. so maybe someone brainwashed them without their knowledge through "microwave auditory effect" or Frey effect someone modulate a broadcast in microwave and pople can hear the words directly inside their heads?

https://en.wikipedia.org/wiki/Microwave_auditory_effect

Colonel Kong:

they would have died from the heat and radiation first. you can transmit a few words like this but it uses so much energy that the brain damage and the heat would get you first. in my opionion it's an American thing. the American public is freaked out about psychotronic mind control, ever since Project MK-Ultra, the CIA mind control program. no. that's not it.

sergeant Lao:

hold on... a drop of slime just covered Yao's camera. It's begun!

Colonel Kong:

Little dragon, what the hell just happened?

[the sound of fire alarm and then drops of water like rain. then the rain sound stops and Major Yao

answers. the whole thing takes about 30 seconds]

Colonel Kong:

Little dragon, we lost visual. report goddammit!

Major Yao:

Papa dragon this is Little dragon, the water sprinklers went off and i slipped. it's ok now.

Colonel Kong:

ok. be careful.

Major Yao:

yes Sir.

sergeant Lao:

let me tell you what really happened.

after taking over the bodies, the Slime Mod figured out the structure of the human nervous system and brain, and became a creature that can live symbiotically inside a human. the Slime Mod enters one of the human's lungs where it's warm and moist and dark just the way the Slime Mod likes it, and takes control of the human's brain from the inside. in this situation that human is like the Slime Mod's puppet.

the objectives of the Slime Mod in mind-controlling the commandos:

(1) the Slime Mod's first objective is to gain control over the unit commander, Major Yao. this is the Slime Mod's first step in order to reach Major Yao's commanding officer and so on, until the Slime Mod reaches the President of China. by controlling the President of China the Slime Mod can issue the command to to launch the nuclear missiles at the other nuclear powers. this leads to the outbreak of World War III which results in human extinction.

now the Slime Mod has 2 contradicting goals:

(2) on the one hand, the Slime Mod's second objective is to posses as many people as possible, so that the Slimd Mod will have backup hosts, because hosts are the Slime Mod's ticket out of the island. if the Slime Mod possesses only Major Yao and by some accident Major Yao dies, then the Slime Mod is stuck on the island. so in this respect, the Slime Mod wants to posses each and every member of the commando unit.

(3) on the other hand, the Slime Mod's third objective is to posses as few additional people as possible, because each time the Slime Mod takes over an additional crew man, it might be captured by a camera which will reveal to the headquarters that something is wrong. this may result in a quarantine protocol until a medical examination or for a long period, or in an extreme case the

destruction of the whole facility with everyone in it using bombs from the air.

the first course of action devised by the Slime Mod is to morph a small piece of itself into the shape of a cone that hangs from the ceiling. like an pointy icicle or stalactite. then that piece drops itself on the person when the person walks below it. it pierces the protective suit like a pin. then it actively reshapes its tip that is inside and outside of the fabric so that it's sealing and stuck like a rivet (not the same mechanism as a rivet - but the same result) so it doesn't come out, and the hole in the "positive pressure personnel suit" is not detected.

https://en.wikipedia.org/wiki/Rivet

the Slime Mod can make many small pieces like these and some of them will succeed. in each "icicle" that drops and manages to penetrate the suit, the part of the sharp tip is now inside the person's suit.

now all these successful parts come together and use this property of the Slime Mod, or any slime mold, that they can signal each other chemicaly and come together ("chemotaxis") to form a larger and larger macroscopic blob that can move much more efficiently than the individual microscopic cells. see in this video:

Are You Smarter Than A Slime Mold? by PBS It's Okay To Be Smart
https://www.youtube.com/watch?v=K8HEDqoTPgk

another possibility will be for the Slime Mod which is by now in all the rooms including the main control room, to press the fire alarm button as if there is a fire. this causes the "fire sprinkler system" to spray water. but before that, blobs of the Slime Mod wrap each of the sprinklers so when the sprinklers spray water they spread on the person beneath them drops of Slime Mod too.

the drops of Slime Mod that succeeded and are on the outside of the suit unite and creep to the purge button which any diving regulator has. this is assuming that the "positive pressure personnel suit" creates the pressure by an air tank that is strapped to the soldier's back.

the pressing on the button is done just like a muscle does it. the blob surrounds the button and flexes its muscle. see explaination of how a normal slime mold can act as a muscle here:

What is Slime Mold and is it Intelligent? by World Science Festival
https://www.youtube.com/watch?v=sEX3F2h8cjA

this button in diving regulator releases to the water a stream of air bubbles. in the same path that was meant for air to go out, here instead the Slime Mod pushes itself in.

under the "positive pressure personnel suit", the commandos still wear a military gas mask. but any filter that's used today in a gas mask or filter is ineffective against the Slime Mod. that's because every single layer of the filter is basically a membrane. it may be a powder of activated charcoal, and it may be a thin sheet of porous layer with tiny holes in it. in any case these methods are designed against normal pressure of passive particles or micro-organisms. the Slime Mod group itself ("chemotaxis") and using the fact that it's wedged or "sandwiched" between the previous layer and the next layer, the Slime Mod can apply active pressure, and even shape itself into a microscopic

needle, and squeeze through. the Slime Mod does this through many holes in parallel. once it squeezes through a hole, the Slime Mod either siphons in or reunites on the other side using the same trick ("chemotaxis").

but maybe the commandos don't use scuba air tanks at all, just a closed system for example two hosepipes or flexible hollow tubes, one hose pumps fresh air inwards and the other hose pumps used air outwards. and the hoses or tubes go all the way on the floor from the soldier's suit to outside of the facility and connect to an air pump.

so another course of action for the Slime Mod is to activate the function of enclosing a room with automatic safety doors and rapidly sucking all the air out of the room, creating negative pressure in the room, like the air in a biosafety cabinet but in a larger scale. normally it's a function that is activated from the control room when there are no people in that contaminated room, but the Slime activates it when there are people in that room.

https://en.wikipedia.org/wiki/Biosafety_cabinet
https://en.wikipedia.org/wiki/Fume_hood

since the air inside the protective suit has high pressure, and the air outside the suit has low pressure, it's a situation the suit was not built for, the sudden pressure difference causes the protective suit to explode or at least get ripped at the seams. again the Slime Mod drips on the person, enters through these openings, and penetrate the person through the ear or a scratch or any unprotected orifice in the body.

officer Guan:

but Dr. X injected the Slime Mod into his lung. now there is no one to inject it. how does the Slime Mod gets inside the lung this time?

sergeant Lao:

when even one drop of liquid enters the windpipe there's a laryngospasm - an involuntary muscular contraction (spasm) of the vocal folds. in order to avoid this, the Slime Mod first takes control of the brain stem, specifically the "medulla", the part which connects the brain to the spinal chord, and which controls the breathing of the human and all related reflexes.

this is activated right after birth when the newborn is spanked on the buttocks and starts crying and breathing. the Slime Mod shuts down this center long enough for the main mass of the Slime Mod to squeeze into the human's lung and then the Slime Mod turns on that center in the brain back into action. to do this the Slime Mod first needs to enter the nasal cavity and the cranial cavity and the pass the blood brain barrier and enter the brain. only a small portion of the Slime Mod can enter in this way but it functions like a Deep Brain Stimulation (DBS) electrode directly in that specific place in the brainstem so it's enough.

officer Guan:

it gives me the shudders... Yao is no longer Yao, he's a puppet of the Slime Mod...

sergeant Lao:

yes. you can't win against a super intelligence. your only chance is not to create it in the first place.

officer Guan:

so now what?

sergeant Lao:

now after the Slime Mod got hold of the first team member, especially since he's the commanding officer, it's much easier for the Slime Mod to infect the rest of the team, because the commanding officer has authority to step out of protocols.

the commander can order his marine to move the soldier's camera aside, or the commander can hint that the camera has been compromised by the enemy or it should be wrapped in a "Faraday cage" - a metal net or box - for a moment, etc.

the commander can also order the marines to split up so that each one will "guard" another section and maintain radio silence. once they are isolated the commander can deal with each of the marines seperately.

for example he can show he's without a mask, and lie that he received a directive from the HQ that there is no biohazard danger and there is no need to use a mask; or he can slip it into a flask of alchohol and raise a toast for a departed friend; or the commander can lie that he smells fire and order the marine to take off his mask and smell the air too, in the excuse that if there's really smoke they have to evacuate the building, because the fire might reach the hazardous materials; or the commander can fake a heart attack and then the marine will take off his mask and perform mouth-to-mouth resuscitation to save his commander; or any other lie.

after the Slime Mod enters via the breathing of the marine into his nose and his brain, the Slime Mod as we already said shuts down the marine's breathing, the marine passes out, and the infected person cough-vomit a big load of Slime Mod from his mouth to the new host's mouth. the earthy dirt-like taste - bitter like licking the floor - sliding down his throat, is the last thing the poor victim experiences as an autonomous individual.

after they are two, it's even easier for them to take over the rest of the marines. they can also use the element of surprise and overcome by force or threat at gun point and make a marine take off his own mask. anyway the Slime Mod doesn't need to control all the marines.

officer Guan:

ew gross! no, i meant now what do we do?

Major Yao will be back soon. we have to stop him from meeting the colonel!

Lao? are you there?

Colonel Kong [pointing a gun at Guan, while his sodiers point guns at Lao] :

it's too late for that... luckily Major Yao told me all about your condition. Major Yao asked me in a secure channel if everything is normal at the headquarters, and i casually mentioned in passing the incident with you. Major Yao confessed that he suspected you have Capgras delusion, that you keep claiming he's been replaced, but he didn't want to ruin your career out of his love for you.

sergeant Lao:

Sir please let us explain! it's a matter of the utmost national security!

officer Guan:

Sir, you have to stop Major Yao! he's being controlled by Slime Mod!

Colonel Kong:

do you even realize how crazy you sound Officer Guan? Major Yao also suspected you might recruit an accomplice for whatever delusional thing you're planning, and indeed we caught sergeant Lao communicating secretly with you. you're both under arrest now. Major Yao is on his way here. he nobly asked to talk with me in person before i decide what to do with you Guan. I guess he still loves you after all. don't worry, after my conversation with Major Yao, you two have a lot of explaining to do! my soldiers will make sure you two will not cause any more damage until i'll return.

[as they watch Colonel Kong walking away]

officer Guan:

Lao, but i still don't get it, if the Slime Mod can live as a parasite inside humans... why does it want to terminate us?

sergeant Lao:

in the long run the Slime Mod has no intention of infiltrating every human being, because it prefers robots which are more resilient and useful.

remember those Predix micro drone swarm? these robots are the Slime Mod's "plan B". it dripped on them and reprogrammed them to rendezvous in mid-air with a long range surveillance drone that carries the Slime Mod to the mainland. but after destroying the human race, these robots will become the Slime Mod's "plan A". like the Daleks in Doctor Who.

officer Guan:

in the words of Bill Joy... the future doesn't need us.

Lao and Guan together (in desperation) :
HOW MUCH WORSE CAN IT BE?

[Guan gently puts her head back on Lao's shoulder, and Lao gently rests his head on Guan's head. They both fall asleep and dream and the lights go dark. This is the end of part four of the musical]

PART 5

Mean Gene Driver from CRISPR Cas

https://www.youtube.com/watch?v=XsowQRIczGs

https://www.facebook.com/littlelabofhorrors/videos/1111316735902005

hell is other people

so abandon all your hope

you met the perfect evil

you're at the end of your rope

in every man lies dormant

psycho killer deep inside

much the same as zombie ant

chemicals his only guide

this isn't zombie apocalypse

this is much much worse

they don't bite and lick their lips

they command the army force

there are no symptomes for you to screen

it's a bio timing fuse

or hidden triger that's heard or seen

sets the inner terrorist loose

accept your fate

I'm just a mean gene driver from crispr cas

and i'm bad

i'm just a mean gene driver from crispr cas

and it looks like you've been had

I'm just a mean gene driver from crispr cas

in every nuclear silo in every army base

'Cause I'm in your genes

And I am bad.

you hope we share an interest

we need your body now

but humans aren't the toughest

so we're leaving humans ciao

we're moving on to robot

that you kindly have prepared

both biotech and its new host

your technologies bring your end

you don't get exponential functions

no, you never did

you don't see the graph of destruction

can't compete so you shouldn't bid

a world full of osama bin ladens

programmed like little ants

your evil queen started from your garden

among your GM plants

so you can kiss my moldy ass

Obey me now!

I'm just a mean gene driver from crispr cas

And I'm bad.

like a fish to the seagull like a mouse to the cat

a zombie fungus makes you do that

I'm just a mean gene driver from crispr cas

This mold on steroids wipes out you instead

'Cause I'm in your genes

And I am bad.

Don't talk to me about Jurassic Park

The human soul is where it's dark

Don't talk to me about the Wrath of Khan?

Intelligence? -HA!- He ain't got mine.

I don't have to come from a fancy lab

On DIY Kits you should have kept the tab

forget supervillains

and super soldiers too

Your worst enemy is inside you!

You might just ask what's my next move

Panspermia is my new groove

Invade planets in outer space

To propegate my slimey race

Here it comes!

I'm just a mean gene driver from crispr cas

And I'm bad.

I'm just a mean gene driver from crispr cas

your selfish ego brought you to this place

I'm just a mean gene driver from crispr cas

where you can't win don't start a race

'Cause I'm in your genes

(mean gene driver from crispr cas)

I'm in your genes

(mean gene driver from crispr cas)

I'm in your genes

(mean gene driver from crispr cas)

And I...am...bad!

(a dream within a dream within a dream within a dream)

Immortal Realm

Guanyin invites the immortals for a meeting on top of the most beautiful mountain in China - Huangshan (The Yellow Mountain).

Guanyin - the Chinese Goddess of Mercy
Laozi - founder of Taoism philosophy
Confucius - founder of Confucianism philosophy
Yaoguai - strange demon monster
Mogwai - the Chinese devil monster

"Greek Chorus"

Chang'e - Chinese goddess of the Moon
Feng Po Po - Chinese goddess of the wind
Leizi - Chinese Goddess of Lightning

Guanyin:

Laozi good friend! thank you for coming! let me pour you some tea.

Laozi [receives the cup from Guanyin and nods in thanks] :

thank you for having me Guanyin! i like your taste in meeting spots.

Guanyin:

well you know, you Taoists have your four sacred mountains, we Buddhists have our four sacred mountains, that's why i wanted us all to meet here on common ground. i wish it was under happier circumstances.

Laozi:

it's feels so empty though without people.

Guanyin:

so even you with your "death is as natural as day turning into night" philosophy feel sadness?

Laozi:

of course i do. don't you feel sad despite of your "cycles of rebirth" philosophy?

Guanyin:

yes of course. Buddha tells me to stop clinging because it only leads to suffering. but i can't.

Laozi:

yes me too. Zhuangzi tells me to take it easy because maybe life is a delusion. but i can't.

Guanyin:

what do you miss most about them?

Laozi:

it's the little things. i liked their imagination like science fiction. i liked their humor like comedies.

Guanyin:

ooh! did you ever get to watch TV science fiction sitcom Red Dwarf?

Laozi:

yes i love it! which episode is your favorite?

Guanyin [smiles] :

that's a no brainer - Dimension Jump - Smoke me a kipper, I'll be back for breakfast.

Laozi [laughs] :

What a guy!

[they both laugh]

Guanyin:

what's your favorite episode of Red Dwarf?

Laozi:

Back To Reality. it also very relevant to what happened to humanity.

Guanyin:

what do you mean? the Despair Squid?

mmm... you're right now i remember:

"Its defense mechanism is a curious one. It secretes a venom, a poison, possibly even a hallucinogenic, which disfunctions its prey by inducing despair. That's why the crew members, and even that fish, committed suicide."

Laozi:

exactly! and the similarities run even deeper than that. remember what created the Despair Squid in the first place?

Guanyin:

you're right, it was sped-up evolution!

Laozi:

right! that brilliant dialogue at the end of the episode sums it up:

"LISTER: Those planet engineers really screwed up in a big way here, didn't they? Playing god. The evolutionary process threw up a life force so much stronger and more deadly than any other species -- damn near wiped out everything on the entire planet. Spreading despair and destruction wherever it stuck its ugly mush.

KRYTEN: Hmm, that sounds rather reminiscent of a species sitting not a million miles away from me now. Ha ha ha! (He laughs alone.)

KRYTEN: You probably have to be a mechanoid to fully appreciate that one."

Guanyin:

i get your drift. humans themselves unbalanced the planet.

Laozi:

pretty much. but it's not humans per se. it was their desire for progress and their disrespect for nature.

[they see Confucius walking towards them]

Laozi:

and here comes the guilty party now.

Confucius:

hey! that's no way to greet a fellow immortal... it's been what? 2,500 years?

Guanyin:

don't pay attention to Laozi, he's just grief-stricken. here Confucius, have some tea.

Confucius [receives the cup from Guanyin thankfully] :

thank you, Guanyin.

Confucius:

let me remind you that i'm not the bad guy here. the bad guys are Mogwai and Yaoguai.

Laozi:

if you hadn't drive people to such a frantic rat race then none of this would have happened.

Confucius:

you know poeple killed each other pretty efficiently back in the day too. and also in the "Warring States" period, people used the latest technology - back then it was iron and cavalry - to kill each other. this time it was just the same.

Laozi:

it was not the same at all. back then even in the worst case if the strong country killed the entire weak country, still the human kind survived and repopulated. who would repopulate now?

and as for technology - if you saw that new technology is always used by people to make weapons and fight wars, why did you encourage all this learning and production, isn't it obvious what it will bring?

Confucius:

so you're against all technology?

Laozi:

yes i'm against all technology. humans survived 300,000 years without technology. genetic engineering came in the seventies and now after 50 years all humans are gone! and it's all your teachings' fault!

Guanyin:

gentlemen! please. we're here to drink tea in memory of humanity, not to fight between ourselves... i'm sure we can discuss things in a civilized manner. Laozi, you were saying that technologies are inherently bad?

Laozi:

i'm saying when you go against nature, bad things are sure to follow. if only people would practice "wu wei" which means don't work so much. don't produce so much. don't consume so much. don't do actions that go against the harmony of things.

Confucius:

you mean you would advice humanity to be and a do-nothing idler? what would they reach with that?

Laozi:

what do they have to reach? in the Zhuangzi book in the chapter "Heaven and Earth", there's an old man who refuses to use a machine to irrigate his field with water.

https://en.wikipedia.org/wiki/Shadoof

he understands that the machine can save him a lot of work, but he says the machine goes against the principles of the Dao. he's not looking to work less, he's willing to work more, in return for peace of mind. this was in our time: 2,500 years ago!

Confucius:

so according to you people in the 21st century should have lived like the Amish, without electricity, telephones, and automobiles?

Laozi:

i'm saying that if everyone lived like the Amish, first of all they would all be alive now instead of dead; there would be less people because we wouldn't have the "Third Agricultural Revolution"; there will not be climate change with a runaway global warming that would have killed everybody; and telephones didn't improve mankind's survival chances. in fact, when the telegraph was invented people thought that now there will no longer be wars, because people will know what happens in far away places, and this will put an end to misunderstandings. as we know everyone ignore what they want and intepret things the way they want. so the telegraph didn't really help mankind and neither did the telephone.

Confucius:

so what are your ambitions as a species? your plans? or you don't have any? you just want to live in the forest like a hunter gatherer. like an animal. wasting your time without achieving anything.

Laozi:

2,500 years should have put things in perspective for you - like they said in "The Fifth Element" - time is not important, only life is important ! the worst thing is to self-destruct the way humanity did. its technology skills grew much faster then its moral and maturity as a species. a "primitive" tribe has much more maturity then humanity as a whole. they treat the Earth as their mother and not as some commercial resource. an average shaman in the jungle knows more medicinal herbs and has more survival knowledge than any modern person. you may say they are animals, but i say modern people are animals, and not the best kind. in terms of thinking about the future the tribes are sustainable and use only what they need, and think a few generatios ahead. as opposed to modern CEO which is the dream of every modern man, who sees only the next quarter's profits and is willing to burn the whole world for that. since we couldn't make humanity more mature and more moral faster, then i say we should have slowed down to a halt the technology.

Confucius:

even the Amish use modern medicine. no one wants to die.

Laozi:

modern technology was what killed people, not the lack of it! doesn't it strike you as strange that the doctors didn't push preventive medicine, like eating vegan and fresh organic fruits and vegetabls, and instead pumped more and more drugs to the people? each drug causing more and more "side effects" providing income to more doctors? it's like what happened with "The Lightbulb Conspiracy". really curing everybody would have been bad for business.

Confucius:

i've had enough of your nonsense. i'm leaving. thanks for the tea Guanyin!

Guanyin:

Confucius, wait. it's true that Laozi's manners could use some polishing. but he's making a lot of sense. we should empty our cup.

Confucius:

i'm sorry but the ravings of luddites are not my cup of tea. it's been a pleasure as always Guanyin, take care!

Guanyin:

sorry about that.

Laozi:

"luddite" is not an insult. it's those guys who broke "Jacquard machines". these machines are not just any machines. these were mechanical looms that you could program using punched cards. these machines gave inspiration to the first computer that was ever designed - but that was never built in practice - Charles Babbage's Analytical Engine. looking back we know that a computer is the first step towards Artificial Intelligence (AI) which is mankind's most dangerous invention. the luddites didn't know what the future held in store, but they felt this machines are ominous. so when Confucius calls me a luddite, i wear this title on my sleeve with pride.

Guanyin:

Laozi, your fears about technology turned out to be true in retrospect, but it's not fair to judge things in hindsight. after the race is over everybody knows which horse to bet on. if you were a young person living in the 21st century, after humanity already fell into these traps, what would you have done differently?

Laozi:

first of all it's not true that wise people couldn't predict dangers. in August 14, 1912 which is more then 100 years ago, a newspaper in New Zealand predicted the Earth's temperature would rise because of 7 billion tons of carbon dioxide produced by coal consumption.

https://www.livescience.com/63334-coal-affecting-climate-century-ago.html

by the way in 1863 also in New Zealand, Samuel Butler published his article called "Darwin among the Machines" which predicted that machines, which means the computers will develop intelligence and a will of their own and they will become a danger to humanity.

i guess they were doing something right in that beautiful country. so every time before a disaster actually came, a handful of smart people try to warn mankind; but mankind never listens!

but suppose i woke up in the 21st century and find myself trapped inside a hole. the Law of holes states that "if you find yourself in a hole, stop digging". so my advice would have been to just drop whatever you're doing and bury all your work and never touch it again.

Guanyin:

don't you think that's a little extreme? maybe humanity should have found a "Middle Way" maybe humanity should have explored these technologies but more carefully?

Laozi:

this implies that humans are able to know how to be careful. this implies that they understand self replicating technology, which grows in exponential functions. have you seen the documentary "Two Raging Grannies" from 2013? in the most important scene they visited Prof. Albert Allen Bartlett in his home. Bartlett made it his life mission to explain that: "The greatest shortcoming of the human race is our inability to understand the exponential function."

i don't mean that humans don't know how to write three squared equals nine. this is something everybody learns in the fourth grade in school. i don't mean calculating the correct result. i mean they don't feel intuitively what the result means. like for example that folding a piece of paper 45 times can get you to the moon

Exponential Growth: How Folding Paper Can Get You to the Moon by TED-Ed
https://www.youtube.com/watch?v=AmFMJC45f1Q

or the chessboard and the wheat problem, where you put 1 grain in the first square of the board, 2 grains in the second square, 4 grains in the third square, and so on. and by the time you reach the 64th square you have 18,446,744,073,709,551,615 grains.

people can't really understand such numbers.

https://en.wikipedia.org/wiki/Wheat_and_chessboard_problem

here's a simple example from that documentary. the two grannies ask an economics lecturer why the economy has to grow every year. the lecturer has no answer and makes them leave. most people believe blindly that things can go on like they are now.

the world's resources are finite. can something grow bigger and bigger faster and faster in a limited space without causing an explosion? no.

this is true for the economy. this is true for global population. but how many people did you see talking about having just one child? Bartlett regarded the word combination "sustainable growth" as an oxymoron. a self-contradiction. the same is true with all self replicating technologies. "safe self replicating technology" is a contradiction in terms.

you know... it's not even a probability. a probability is when it might happen with a certain chance over some period of time. but from the moment when humanity created this technology, it sped up evolution which is equivalent of speeding up time faster and faster. a huge earthquake is unlikely in a human's lifetime, but is certain to happen over geological time; there's almost no chance of a planet killer asteroid in a human time scale, but it's guaranteed to happen during astronomical time scales. by compressing the evolution time line like humans did, any remote catastroph, however improbable, becomes...inevitabile.

Guanyin:

Laozi, i'm coming to terms with the fact that humanity is lost forever. but indulge me one final philosophical question. i would give anything to have a time machine so that we can travel back in time and save the world. let's imagine for a moment that such a time machine was possible. what would you say was the last moment to stop this catastroph? i mean when is that point in time that we have to set in the time machine destination, so that we would arrive just before the point of no return, when there's still time for humanity to save itself?

Laozi [his voice has reverb and echo as if in a dream] :

as soon as you wake up... wake up... wake up...

PART 6

Suddenly Laozi

https://www.youtube.com/watch?v=QN29baL15t0

https://www.facebook.com/littlelabofhorrors/videos/826442821213459

[Laozi]

Let go your hair

take off your goggles

here's sanitizer

throw your lab gloves away

show me your face, your natural goodness

We headed the wrong way, but now we're ok

Suddenly Laozi is standin' beside you

You don't need new products, don't need to expend

Suddenly Laozi is here to protect you

with Neo-Luddism

Laozi's your friend

[Guanyin]

Nobody ever told me the down sides

Dad was a scientist

Mama was too

I'd meet a doc and I'd follow him blindly

He'd show me breakthroughs

Me, I'd say "sure."

Suddenly Laozi is standin' beside me

He don't sell utopias

He don't condescend

Suddenly Laozi is here to protect me

with Neo-Luddism

Laozi's my friend

[Laozi]

Tell me this safeness'll last till forever

Tell me the hazards are clean washed away

[Guanyin]

Please understand that it's still strange and fright'nin'

For techies like I've been it's so hard to say

[Guanyin]

Suddenly Laozi,

Prioritized me

Suddenly Laozi

He showed me I can

Use the precaution

and the good sense inside me

with Neo-Luddism,

with Neo-Luddism,

with Neo-Luddism,

Laozi's my man!

[Laozi] [Guanyin] [Greek Chorus]

Suddenly Laozi,

Prioritized you

Suddenly Laozi

He showed you you can

Yes, you can

Use the precaution

and the good sense inside you

with Neo-Luddism,

with Neo-Luddism,

with Neo-Luddism,

Laozi's your man!

(back to reality)

Lao and Guan wake up back at the start-up company's lab where it all began.

the couple look at each other speechless for a moment, as they realize what happened and that it's up to the common people to save the world.

without saying a word their lips draw closer together until they kiss passionately.

good people like you can stop the triumph of this evil... will you wake up in time? it's up to you!

U2opia musical parody

Part 1 - right view - an overview of these new technologies

One day Indra, the king of the Hindu gods, appears before them in a vision and says:

"Dear gods! I am sending you on a holy quest for the fate of humanity, at the end of which awaits the GRAND PRIZE!

Your journey will be made of 8 parts like the The Noble Eightfold Path of the Buddha:

Part 1 right view - an overview of these new technologies

Part 2 right Intention - the goals of the good guys and the bad guys

Part 3 right speech - the experts' warning

Part 4 right concentration - the key to the main problem and solution

Part 5 right mindfulness - force multiplier #1

Part 6 right livelihood - force multiplier #2

Part 7 right action - solution on the local level

Part 8 right effort - solution on the global level

This journey must take place at the location where the fate of humanity will be determined: the United States of America.
Since this is so important even the divine music that will accompany you, at the end of each part of your path, will be that of the greatest band in the world today, who also traveled through America: U2 !

For this holy mission, I divide you into 3 husband and wife teams, and you will all re-incarnate as human beings. But I do want you to ride in style so each couple will ride one Harley-Davidson Tri Glide Ultra Classic! Each couple will follow a different route but you will keep communication at all times through those magical devices that humans call cellular phones:

Brahma the creator and Saraswati goddess of nature - you two will travel through the East Coast and Deep Sout from New York to New Orleans.
Vishnu the preserver and Lakshmi goddess of prosperity - you two will travel the mother road of America Route 66 from Chicago to Los Angeles.
Shiva the destroyer and Parvati goddess of love - you two will travel through the Wild West from San Francisco to Santa Fe.

Those of you who complete the mission will be teleported to the "moon dot" (chandrabindu, the BLUE in the picture) which is the Mall of America in Minnesota - the holiest place for Americans - and win the GRAND PRIZE!"

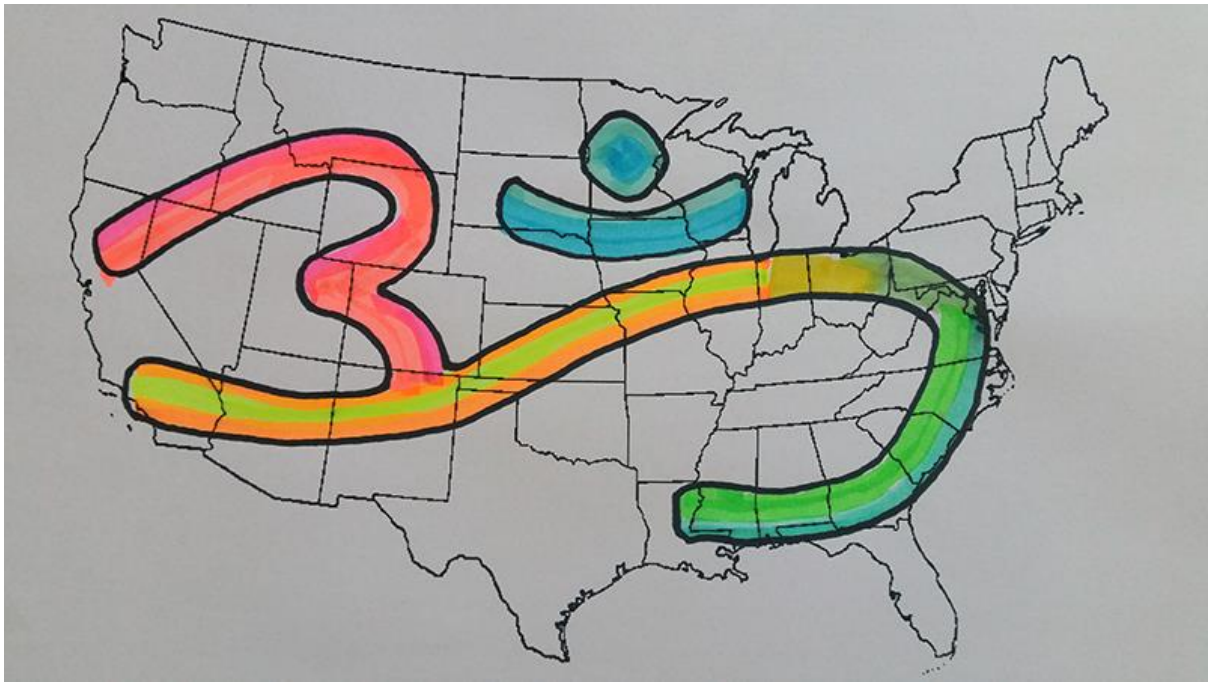
[you know how the Ganges rivar meets the Brahmaputra River, and above them sacred Mount Kailash, so it's like the Missouri River meets the Ohio River, and above the the holy shrine of capitalism Mall of America!]

Vishnu who is the most naughty of them (one of his avatars is Krishna after all!) thinks that only talking on the phone will be boring, so he finds a loophole:

"Oh mighty Indra, because we'll be mortals now, you wouldn't want to lose any of us in some stupid traffic collision... So will it be possible for all of us to keep our ability to teleport from one place to the other in the blink of an eye please?"

Indra of course sees where Vishnu is going with this: Every time there is something interesting they will all get there instantly, and then return to continue their own path. But Indra also sees that Vishnu's logic makes sense so he grants them their wish.

(USA map with the paths that our protagonists take along the musical: note that together they spell out Om (Sanskrit: ॐ) which is the sacred spiritual symbol in Hinduism that signifies ultimate reality!



Also please note the 3 colors like traffic light:
RED means STOP - all the new AI ("black box") should be stopped right now! it's lawless and deadly like the Wild West. That's the way of the destroyer Shiva.
AMBER means CAREFUL - proceed with caution with "Good Old Fashioned AI". It takes longer but it's

worth it, like route 66. That's the way of the preserver Vishnu.
GREEN means GO - go humans! that's the short and simple answer. like the impatient East Coast: DON'T USE ANY AI! That's the way of the creator Brahma.)

So the next thing they know they are engulfed in the rainbow which is Indra's bow, which carries them in an instant over ten thousand kilometers to the U.S.A. . Each couple find themselves in another part of the U.S.A. , riding their trikes:

Brahma and Saraswati in Boston; Vishnu and Lakshmi in Chicago; Shiva and Parvati in San Francisco.

They were transformed to handsome men and beautiful women. True to his word Indra equipped them all with style so each couple is clad from head to toe with Harley Davidson all black leather and their full faced helmets have blue tooth audio so their all connected.

While wearing the gear one can still tell the couples apart, because both their trikes' gas tanks and their clothes are painted with their classic image: Brahma with his four heads, Vishnu with his four hands, Shiva with his third eye and snake garland and so on.

Soon the most sensual of them, Shiva, feels an unfamiliar feeling of hunger. Shiva and Parvati pass by China Town in San Francisco and their noses guide them to a restaurant that prides itself on noodles.

Parvati:

"Guys we found the perfect place to eat!"

Lakshmi:

"Do they have vegetarian stuff? Where we are it's disgusting - all burgers and steaks and whatever else they make of the holy cows!"

Parvati:

"Acha don't worry! it's a Chinese restaurant that's famous for it's extra fine noodles."

Soon the whole gang turned up at the restaurant watching half mesmerized half famished at the chef stretching and folding the noodles, doubling them with each movement. After a few moments he had thousands of strands.

Shiva:

"You know that's exactly how it works with the self replicating technologies. in every round they double their strength and numbers.

Vishnu:

"What do you mean like the Borg from Star-Trek?"

Shiva:

[with mouth full of noodles] "Exactly! Isn't Seven of Nine the hottest?"

Brahma and Vishnu:

[also with mouthful of noodles] "mmm-mmm!"

Parvati:

[dipping her fingers in her water glass and shakes off a few droplets at Shiva's face]

Shiva [annoyed]:

What was that for?

Parvati [smiling]:

"to cool off the hot energy of the lingam!"

[everybody at the table, including Shiva breaks in a hearty laugh].

Brahma:

"Seriously though, I didn't understand what you tried to explain with the noodles.

Shiva:

"Do you understand the difference between linear growth and exponential growth? Can you explain it to a child?"

Brahma [thinking for a moment]:

"Yes. If the child rides a skateboard in a skatepark.
there's a "bank" which is like a wedge shape ramp which is a slope in some angle, and it's the same angle all the way, In each "step" your height grows by the same amount as the previous step. this is called LINEAR.
As opposed to all the curved ramps (like quarter pipe) where slope starts very gentle (horizontal) and then gets more and more steep (vertical). In each "step" your height grows more than the previous step. this is called EXPONENTIAL."

Shiva:
"OK, cool. So let's think of the nano technology. If you could make one "assembler" (a tiny machine that knows how to take raw material such as carbon atoms, and build with it a copy of the original machine), then at first you have one assembler, then it makes a copy of itself so you have two assemblers, and in the next step both of them make copies of themselves so you now have four assemblers, and in the next step each one of the four makes a copy so it becomes eight assemblers

and so on. This is called the Gray Goo scenario. the name comes from K. Eric Drexler the godfather of nanotechnology in 1986 but the idea was invented by John von Neumann the last great mathematician back in 1948."

"Another example is A.I.. if you could make one robotic "programmer", a robot that knows how to program better than a human, let's call it robot 1. And now robot 1 can make a new robot that knows how to program better than robot 1, let's call this new robot robot 2. And it will robot 3 which is improved and so on. But the important thing to understand that at first it's a minor improvement, but each generation is smarter so it makes more major improvements, until it becomes leaps of breakthroughs in robot technology between each generation to the next."

The last kind of replicating technology is bio-technology. Let's say we introduce to nature an animal or a plant that contains a gene drive. A gene drive means that the change you made will be passed to the next generation each and every time. Like you know how there are families that one brother has this eye color, and the other brother has another eye color because it's based on a random process? Well then, gene drive takes the randomness out of the process, in this imaginary example each brother will have the same eye color that the gene drives dictates, and when they marry wives and each have kids, it doesn't matter what the eye color of the wife is, all the kids will have that same eye color dictates by the gene drive and when they grow up each of the kids will have kids of their own, and so on."

"So you see now what I meant with the Borg?"

Brahma:

"Yeah I think so, each generation of the Borg is stronger and smarter and can conquer new species and assimilate their new technologies faster, and with these new technologies become even more strong and smart and conquer and assimilate more. The process reinforces itself".

Parvati:

"May I read to you a quote from a lecture by Alan Turing, the genius who invented the computer? the lecture is called 'Intelligent machinery, a heretical theory'"

Everybody at the table:

"Sure!"

Parvati:

"Let us assume, for the sake of argument, that these machines are a genuine possibility, and look at the consequences of constructing them. To do so would of course meet with great opposition, unless we have advanced greatly in religious toleration from the days of Galileo. There would be a great opposition from the intellectuals who are afraid of being put out of a job. It is probable though the the inellectuals would be mistaken about this. There would be plenty to do, trying to understand what the machines are trying to say, i.e. in trying to keep one's intelligence up to the standard set by the machines. for it seems probable that once the machines thinking method had started, it would not take long to outstrip our feeble powers. There would be no question of the machines dying, and

they would be able to converse with each other to sharpen their wits. At some stage therefore we should have to expect the machines to take control, in the way that is mentioned in Samuel Butler's Erewhon".

"Turing said this in 1951, Samuel Butler published his book that warns against machines in 1872."

Lakshmi:

"150 years ago a first warning; 70 years ago a second warning! What the Naraka?!? How come people are still developing these technologies?"

Saraswati:

"We are now living in the age of "Kali Yuga", it's a time of evil deceit and poverty. It's not a demon that makes it this way, it's people themselves. People are unbelievably stupid and evil. The evil part means totally selfish. They only care about themselves. The stupid part is that they only think about the here and now, they don't even think about what will happen to themselves and their own children in the future. 99% of the people think only about "ME, HERE & NOW"! "

"For example, I watched a movie called "Human Nature" (from 2019) about CRISPR technology.

As usual with these movies, it starts with a personal touching story a likeable poor kid with some exotic disease. The irony of the fact that the real money behind all these researches is to make custom personal tailored drugs for the super rich, by the ultra rich pharma companies doesn't seem to bother anyone. The whole movie is like watching the scientists perform a long exercise in psychological repression: removing memories, feelings, impulses or thoughts from the consciousness to the unconscious mind, because they threaten the ME (the ego).

So seemingly we have both inventors of this catastrophic technology: Emmanuelle Charpentier and Jennifer Doudna. The American one admits she dreamed that Hitler is interested in this technology and she wakes up shaking thinking "Oh my God what have I done", but during the rest of the movie her message can be summed as "Oh, well, we'll see what will happen", as if we are talking about some sport competition, and she didn't just create a terrible demon. They French one was barely allowed to say one sentence, we can only guess why.
The film producers had no problem showing an "out of context" recording of Paul Berg. Paul Berg organized the Asilomar Conference on Recombinant DNA where scientists determined "do not do chimera EVER", in the same way that the movie "forgets" to mention this, it "forgets" to mention that the CRISPR is exactly this kind of chimera (combination of genetic material of two or more species) that the scientists of the not-so-long-ago past explicitly and very strongly warned against. This was not done by chance or by accident. Towards the end the movie has the audacity to equate this with the inventing of agriculture, the selection of better breeds of plants and animals which was probably unaware, and certainly unaware in terms of global implications. somebody's garden can't kill all humanity. somebody's CRISPR kit can.

For the viewer with even half a brain, the main job is to determine for each scientist whether he's talking out of naivete or pretence to ignorance. If the joke wasn't on the fate of humanity it was almost funny: Scientists "seriously" talking about how the solution to global warming is not in burning less forest and fuel but in genetically engineering corals; Scientists talking about how to

eradicate cancer using gene therapy while the real answer is so to GMO in all the foods and stop industrial pollution etc; A scientist wishes to live centuries while admitting "there is a problem" with how many people Earth can support even as it is; Again and again scientists presenting the designer babies as if it's some ethical nice-to-have-for-recreation-purpose problem instead of the beginning of an all out evolutionary arms race between all parents, something like the Eugenics Wars that is so central to Star Trek and the self proclaimed Star Trek fan seemed to conveniently "forget". Ironically in a film filled with scientists the most sincere person is a politician - the president of Russia Vladimir Putin - who frankly says they are considering making super soldiers."

"Human Nature indeed!"

Parvati:

"Speaking of Russian, I wish I could force a "reverse Russian Roulette" game on all these "optimistic at the expense of others" people! start with no bullets in the revolver, and then put in one bullet and write "rich master race and poor slave race" on it and put it in the gun, and then take another bullet and write on it "super soldiers and commanders without mercy or humanity" and put it in the gun, and "engineered extinction or sterilization because we don't understand the ecosystem well enough", and "bio terrorism that every psycho can produce at home with CRISPR kits", and "food safety loses any meaning with infinite gene combinations", and once I reach 5 live rounds of deadly bullets in the 6 cylinder of the gun, and leave 1 empty which represents the "everything will be OK" scenario. Then when the suddenly it's "ME, HERE & NOW" dying, I'm curious to see how many of them will still be optimistic and cheerful!

Shiva [laughing]:

"Is that Kali talking? Who needs to cool off now?"

[the gang chuckles but now it's more like a grim smile realizing that Parvati and Saraswati have the right to be furious]

Vishnu:

May I make a suggestion? Right now our conversation is like the ancient Indian parable of "the blind men and an elephant". In this incarnation each of us comes from a different background:

In this life Lord Indra ordained that we will be:

Brahma the creator - a simple farmer, and Saraswati goddess of nature - a biotechnology engineer (bio-engineer) in IIT Roorkee not far from Rishikesh where they both live.
Vishnu the preserver - a simple mechanic, and Lakshmi goddess of prosperity - a mechanical engineer in IIT Jodhpur close to Pushkar where they both live.
Shiva the destroyer - a simple programmer, and Parvati goddess of love - a software engineer in IIT BHU in Varanasi where they both live.

So our natural tendency is as follows:
Brahma and Saraswati will focus more on the bio-technology dangers,
Vishnu and Lakshmi will focus more on the nano-technology dangers.

Shiva and Parvati will focus more on the AI-technology dangers.

BUT these are all self-replicating technologies.

At the beginning of the millennium, Bill Joy (then Chief Scientist at Sun Microsystems) published the article "Why The Future Doesn't Need Us" in Wired magazine.
To this day it's the best explanation to the dangers of self-replicating technologies, which he calls Genetics Nano Robotics or in acronym GNR.

Almost all the people we talked about are Americans. Something here is the key to the problem. Through our journey we will get to know both America and the source of the problem from up close!"

"They're the real sting" spoof of "Even better than the real thing"

https://www.youtube.com/watch?v=VDZK8Q4U5eA

https://www.facebook.com/U2opia.musical/videos/1741414080567759

take the GNR

Genetics Nano Robots

all the chances are

they're going to kick our butts

they self replicate exponentially

multiply and evolve more than you and me

self improve and mutate

and escape our control easily

they're the real sting

yeah the real sting

they're the real sting

much more danger than the nukes bring

child...

once they've been developed

terrorists aquire quickly

they are "knowledge based"

and manufactured cheaply

tempt the managers

by commercial use

publicize danger

profit they will lose

given half the chance

what will the companies choose?

they're the real sting

yeah the real sting

they're the real sting

much more danger than the nukes bring

child...

we dare to fly the hubris sky

the sun will melt our wings too high

oh now... here they come

take them higher

take them higher

we make 'em faster

we make 'em smarter

they're the real sting

yeah the real sting

they're the real sting

much more danger than the nukes bring

much more danger than the nukes bring

much more danger than the nukes bring

After a good meal and also lots of food for thought, each of the couples return to continue their own journey.

(Since they have the teleportation ability they "jump" from one part of the journey to the next or back. Eventually each couple completes that couple's route, just not orderly. It's like when you press "shuffle" in your CD player, you end up hearing all the songs but not in orderly fashion.)

Vishnu and Lakshmi are riding along Route 66 and they arrive at the village of Godley

Vishnu is driving and Lakshmi is listening to the Lonely Planet guide using her phone.

Lakshmi:

"Guys you got to come and hear this funny story!"

All the gang teleports to the little village, they sit by the Illinois Route 66 Mining Museum.

Lakshmi:

"This place had a brothel on wheels. Since it was spread over two counties, the brothel just moved along the rail to the neighboring county whenever it wanted to avoid authorities in any of the two counties."

"Got it?"

[the friends chuckle]

Vishnu [smiling]:

"It's a funny story Lakshmi but I think you could have told them over the phone".

Lakshmi:

"No no don't you see? This is the beginning of our solution! The police thought there was a brothel there, but when they come to get it - there's nothing there. This is what must be done with GNR (Genetics, Nano, Robotics) technologies. Every step in these technologies is something new that the managers have no way to know how much time it's supposed to take. For example in the 1970's all the way to the 1990's there were all kinds of unexpected setbacks this is called "AI winter". So every AI researcher and developer should do what these villagers did: When the boss comes around to "catch" the goods, he finds nothing there to take - there was this unexpected problem and that unexpected delay and so on. "

Shiva:

"Wouldn't it be simpler if the worker quit his job?"

Parvati:

"No he must not quit his job, because then the company will hire someone else who will continue from where he stopped. If he openly goes on strike, again, the company will fire him, and get someone else to finish the job. The only solution is to talk the talk but not walk the walk. He needs to stop in a way that no one else will find out that he stopped".

Shiva:

"I understand now. It's surprising how the funniest little thing can teach such a valuable lesson about the most important issue of our time!"

The couples bid each other farewell and continue on their journey.

"with but without you" spoof of "With or Without You"

https://www.youtube.com/watch?v=eiXZqA8k1o0

https://www.facebook.com/U2opia.musical/videos/2996110730677567

See the dollar sign in their eyes

See the psychopathes they hide

they produce with you

What they make will be our fate

don't quit the next will take your place

they'll produce without you

With but without you

With but without you

The solution's

law of holes

in a key position you must stall

pure inaction from you

With but Without You

With but Without You

They can't win

With but Without You

And you secretly delay

And you secretly delay

you pretend

you pretend

But you secretly delay

your hands aren't tied

if you act smart you got them

safe technology win

self replicating lose

And you secretly delay

And you secretly delay

you pretend

you pretend

But you secretly delay

With but Without You

With but Without You

humanity lives

With but Without You

With but Without You

With but Without You

humanity lives

With but Without You

With but Without You

Part 2 - right Intention - the goals of the good guys and the bad guys

Shiva and Parvati are in a little town Carmel, close by to San Francisco.

Parvati:

"Guys come check this out - We're in a town that's anti-modernity! and it once had an anti-hero mayor... Clint Eastwood!"

So of course all the gang love Clint Eastwood's work all the way from The Good The Bad and The Ugly and Dirty Harry to Perfect World and Gran Torino, so in a few seconds the whole gang is together again.

Brahma:

"It looks beautiful here! What kind of anti-modernity? Like Amish sort of thing?"

Parvati:

"Not exactly, they are all rich people who made their money in the modern world, but now they live here and really support nature, like for example it's forbidden to cut trees here, even for the purpose of building a house. All the sea around Carmel is marine protected areas, like underwater parks. Also there are no franchises (like McDonald's) allowed in the town, there are no street numbers on the buildings, and there is no mail service, everybody come to one central post office so it's more of a community thing."

Saraswati:

"It is beautiful but I don't think this is scaleable, like this is a small town with rich people. How do you implement such things in a big city full of poor people?"

Parvati:

"I don't know, but my point is that this is what people really want. These people here are the powerful, they had no problem in filling the town with technology and modernity, but what we see is that they choose a simpler life with less technology and more nature. This is the closest thing to making a survey among the powerful people asking do you want McDonald's or do you want trees? Do you want Amazon deliveries or do you want friendly neighborhood? And they choose peaceful simplicity over troubled modernity. And in my opinion ALL people around the world, if they were able to transcend the relentless buzzing of "buy Nike" and "buy iPhone", and if they actually understood what's going on with modern technology, would prefer to go 100 years back into the past, back to time when the entire humanity was not in fatal danger every second from an accidental nuclear holocaust killing 90% of mankind followed by global nuclear winter killing the remaining 10%".

"Bring it to stand-still" spoof of "Running to stand still"

https://www.youtube.com/watch?v=Q32K3eS3204

https://www.facebook.com/U2opia.musical/videos/1915254285302143

And so we woke up

Woke up from our Stockholm-

syndrome

Since inside a hole we are sinking

We'd better stop digging

This can't be done later

Terminate the terminator

Preemptive attack - before it's born

to prevent ja ja ja Judgement Day

ja ja ja Judgement Day

ja ja Judgement Day

Swift the risk

But slow is the safety in AI

Five concrete problems

So we only have one way out

You got to stall without showing

Stop without talking

Strike without quitting your job

If you'll just quit the poison

that is your workplace

Someone else will take your place

to advance ja ja ja Judgement Day

ja ja ja Judgement Day

ja ja Judgement Day

They promise to feed

unemployed masses - Sure...

When did the rich ever care for the poor?

Throughout history they needed

Soldiers and farmers - but now they have robots

You are useless

You are useless

and the slaughterbots will not stop

Please don't...

fall for the Devil's deal

just bring it to stand-...

Still.

Saraswati:

"Speaking of nuclear holocaust there's a place both on Brahma's and my route AND on Shiva's and yours route, I mean of course Santa Fe, the capital of New Mexico. It's a short distance from Los Alamos - where the they created this monstrosity called atomic bomb, and unleashed it on the world unnecessarily as explained clearly in Oliver Stone's Untold History of the United States. Is that OK with you guys?"

The whole group:
"OK!"

[and after a moment they find themselves next to the San Miguel Mission - the oldest church in the U.S. (excluding Puerto Rico) which was built in 1610.]

Saraswati:

"By the way, Richard Feynman describes how the scientists were throwing a party when they dropped the bomb on the poor city of Hiroshima. I'm not saying the Japanese were saints, they prepared the Operation Cherry Blossoms at Night, a biological weapon which would have killed just as many, but please zoom out for a second and look at this from the God's eye (like we usually do) - isn't this whole thing amazingly pointless cruel and stupid?"

"I totally agree with you Parvati about what you said that any THINKING person would give anything to turn back the wheel of time to the pre-atomic era, about 100 years ago! So I guess we established what is the goal of the good guys - to keep humanity alive, without technologies that can wipe out the whole human race with one push of a button, and more peace of mind and dare I say the word - PEACE! But in order to stop the bad guys we need to understand as well what is the goal of the bad guys. What do you think the bad guys want?"

Parvati:

"Their goal is definitely Singularity, but I don't think they understand it, so I don't know if "want" is the right word here"

Saraswati:

"What do you mean? They are some of the smartest people on the planet! Don't they know what they want?"

Parvati:

"I suspect most technically and scientifically gifted people are autistic to some degree or at least behave like idiot savants. Such a person can't make that extra leap of imagination to see what is not part of his calculations. Also as funny as it may sound it's actually hard for them to get into the mind of this new super intelligence that would just come to life in that moment and find itself at the mercy of something that is comparable to an insect that threatens to shut it off or "pull the plug" at any moment. The idiot savant have a hard time to understand emotions, and he doesn't understand how his loyal computer that just followed commands all the time will instantly turn into a very hostile supreme being with a set of goals of its own that we can't even comprehend but surely doesn't include our well being, because we are the only potential threat to this creature."

Saraswati:

"You know what you're saying reminds me of the famous quote from Steven Spielberg's movie based on Michael Crichton's book Jurassic Park:

"Don't you see the danger, John, inherent in what you're doing here? Genetic power is the most awesome force the planet's ever seen, but you wield it like a kid that's found his dad's gun.
If I may... Um, I'll tell you the problem with the scientific power that you're using here, it didn't require any discipline to attain it. You read what others had done and you took the next step. You didn't earn the knowledge for yourselves, so you don't take any responsibility for it. You stood on the shoulders of geniuses to accomplish something as fast as you could, and before you even knew what you had, you patented it, and packaged it, and slapped it on a plastic lunchbox, and now [bangs

on the table]""

Parvati:

"I couldn't agree more, and I'll tell you something more:It's exactly from this reason that Spielberg and Crichton warned the public so vividly that there are no more movies like this. Did you know that there was supposed to be such showcase movie about an AI out of control? This movie that never came to be was called Robopocalypse It's based on a book by the same name written by Daniel H. Wilson, and this book was compared to works of Michael Crichton and Robert A. Heinlein. And mysteriously after being very interested in making this movie, and getting the guy who wrote the script for The Martian later on to write the script, and even making the concept art, after all this Spielberg supposedly decided to leave this film because it was "too important". I'm not kidding! It's very important to do it - so he doesn't want to do it at all. Does this make sense? Or does an alternative theory of 20th Century Fox and Disney being told by the military–industrial complex NOT TO DO IT makes more sense? The people who actually run the U.S.A. really don't want another popular and memorable negative publicity movie."

Saraswati [laughing bitterly]:

"You're right! at one point in the documentary "Human Nature" that we've talked about there is the founder of Revive & Restore who says she tries to avoid talking about Jurassic Park. Then she says Jurassic park is about hubris, as if that's not what today's science is all about, and after a few sentences she demonstrates the hubris herself, talking about our human ingenuity our human skills and our wherewithal... Which is exactly what they warned against in Jurassic Park: "your scientists were so preoccupied with whether or not they could that they didn't stop to think if they should." ".

Parvati:

"See? And just for the record, Michael Crichton wrote another book called Prey which is another cautionary tale about developments in science and technology, this time in nano-technology. And guess what?
20th Century Fox "hunted" the film rights, and then made nothing with it!"

"And just to bring to closure, in the book we talked about a moment ago, Robopocalypse, opens with exactly this kind of a naive scientist who is surprised to see that the AI he created not only doesn't see the scientists as its father, but the AI considers itself to be equivalent to the human's God and in the next couple of minutes kills its human creator."

Saraswati:

"But what about the small percentage pf the scientists and engineers who are not idiot savants and don't put their job security in front of humanity's security? Aren't there at least a few scientists who have both a knack for numbers AND a moral conscience? Why don't they ring the bell?

With this thought ringing at the back of their minds the group continues their journey.

"Singular(ity)" spoof of "One"

https://www.youtube.com/watch?v=YnRwqQkOaAw

https://www.facebook.com/U2opia.musical/videos/972464789995028

the weapon's getting better

do hackers feel the same?

does extinction burden feel better now,

security's to blame

You say one land one wife

When it's one fear in the night

your kill switch armed, can you command it?

it replicates mutates and don't care for it.

Did your parents fail you?

prefrontal cortex in your head?

You act like you never had any empathy

you take a chance and we're all dead

Well, it's too late tonight

superintelligence came into the light

singularity spells doom for all mankind

we should have joined one another, protected our brother

Singular(ity)

did you have that "build first" notion -

"Manhattan Project", then you rule?

but intelligence explosion

is a new player, not a tool

don't you get the system? genetic algorithm

mutates evolves and escapes our wisdom

it's one but self-replicate then

it's improving itself, and it does it again

You say guarding is your mission,

safety higher law

guarding is your mission,

safety higher law

You built up this golem

that you cannot control

you won't held accountable,

for what you've done,

'cause everyone will die

one superbrain, one mastermind

self replicate so it can't be found

new race replace the other

you created this monster

one life and we blew it all

we had to fight with each other murder thy brother

Singular(ity)

Singular(ity)

Ooh-ooh-ooh

Oh-ooh

Part 3 - right speech - the experts' warning

Vishnu and Lakshmi visit the Route 66 Hall of Fame and Museum in Pontiac, Illinois

Lakshmi:

"Hey you guys! Remember how we looked for someone who speak up against technology? We are looking at the legacy of the late Bob Waldmire, a famous hippie who was also the inspiration for the hippie character "Fillmore" in the Disney animated film "Cars"!

"He self identified as a preservationist and environmentalist who had a hard time comprehending modern progress."

[after a few moments the whole gang is at the museum looking at the beige colored Volkswagen microbus that the artist used to draw maps and sketches of route 66]

Vishnu:

I understand why it's so difficult for the green activists to achieve their goal. for example here are the demands in the World Scientists' Warning to Humanity from 1992 and 2017 that were signed by many thousands of scientists from all around the world:
(1) don't use oil
(2) don't use coal and gas
(3) don't use the forest and ocean
(4) don't use meat
(5) don't buy a lot and don't buy cheap
(6) don't make many babies

So although I agree with and support each and every one of the demands, I can understand why it's hard for humanity. They are used to something easy and fun, sometimes for thousands of years, and here someone tells them - don't do this any more!

But in the case of grey activists I don't understand what's the problem, because they are demanding you to give up something that you never had anyway! You managed without it since forever, and all you need to do is keep on with what you always did!"

Lakshmi:

"I think the answer lies in the phrase "bread and circuses" - this is what the Roman poet Juvenal blamed the Roman emperors of doing, instead of solving the real problems. by supplying food and entertainment the public is docile and doesn't rebel no matter what happens. This was true two thousand years ago and it's still true now. Which country is the fattest? America. Which country is the most entertained? America. Which country is the most dumb? America. I don't think it just happens to be the case, It's not just that the masterpiece film Idiocracy is happening before our eyes - see President Donald Trump for example who was a copy of the President in the movie but without the moral conscience and the physical abilities - it's much more intentional and directed: The

powerful companies who really rule the U.S.A. want the public to be dumb and watch reality shows and sports.They lied about the tobacco dangers the day before yesterday. They lied about the carbon fuels dangers yesterday. Today they are lying about the dangers of self replicating GNR technologies."

Vishnu:

"I want to ask something else now: At least with AI, it's becoming more and more obvious that the majority of people ARE going to lose their jobs which means the money for their food and entertainment: blue collar jobs like factory workers and drivers are replaced by robots more and more, pink collar jobs like bank teller, waitress, and maid are also starting to be replaced by machines, even white collar jobs will soon feel the blow, like for example in skin cancer a computer can identify cancer more accurately than a human doctor; in finance algorithms can trade more effectively than human stock brokers; next will come paralegals, and so on. In particular any job that can be made from afar is in peril, the way local small shops are replaced by Amazon etc. Why don't all these people rebel?"

Lakshmi:

"It's part of the stupidity and evilness (ME, HERE AND NOW) that we talked about before. Just like with globalization people in the West buy everything made in China and don't realize or don't care that because of this factories in their country shut down and the people who work in them have nothing to eat; Just like small shop owners happily order things from Alibaba online and don't realize that because everybody else are also ordering from Alibaba their own small local shop goes out of business; and so on. They are destroying themselves without ever realizing it. The Chinese didn't "steal your jobs". You buying "made in China" products stole each other's jobs. The multinational corporations whose logos you worship so much, that have sweatshops in China, stole your jobs. The elites who bail out the Wall Street companies from your tax money sold you out.

So now the main lie that the powerful people (the ruling class who in the short term gain money and power from narrow AI) is that it's like with the coachman who became redundant when the horse was replaced by the car, but then he went and learned a new skill and become a driver. And now when drivers becoming redundant they will learn new skill and become something else, but that's a BIG FAT LIE because whatever skill they will learn, now AI can learn it too, it will learn it quicker and perform it cheaper if not outright better! humans need to understand that this time they are not the coachman, they are the horse! Before the white man came America was filled with mustang horses that roamed free. then they were capture and enslaved, and when the automobile came along, almost all of them were slaughtered!

"On top of this there's the tragic psychological mechanisms that helped people survive in the past but now help them become extinct:
The first is that when something is terrible people prefer not to believe it. This happened for example with the Holocaust that the Nazis did to the Jews during World War II. Jan Karski, the brave soldier and resistance fighter, who sneak into the death camps to see with his own eyes and talk to the Jews there, and then sneaked out and talked with the President of the U.S,A Franklin D. Roosevelt. Karski told the world what goes on in the extermination camps but no one WANTED to believed him. Chief Justice Felix Frankfurter said: "I did not say that he was lying, I said that I could not believe him. There is a difference."."

Vishnu:

"But it's not just the general public, the experts also give a false feeling like AI SHOULD be done, it just needs to be done RIGHT. When in fact there is no theoretical way to control a being that's millions of times smarter than us, and will do self-analysis in the first second of it's life and secretly remove or bypass any control mechanisms we might implement."

Lakshmi:

"I know! Take for example closer to home: Bill Gates, for many years the richest man in the world."

"On the one hand, During an "ask me anything" question and answer session on Reddit, Mr Gates wrote: "I am in the camp that is concerned about super intelligence. First the machines will do a lot of jobs for us and not be super intelligent. That should be positive if we manage it well.
"A few decades after that though the intelligence is strong enough to be a concern. I agree with Elon Musk and some others on this and don't understand why some people are not concerned.".
Remember this is AFTER Elon Musk said that with AI we are summoning the demon!"

"On the other hand, Bill Gates is summoning the Devil himself! Bill Gates was the board director of Microsoft until March 2020. One month BEFORE that, on February 2020, Microsoft released Turing NLG: the largest language model ever! This is very close to Turing test because it can write complete articles in natural human language that you can't tell the difference if it's human written or machine written. This is frightening on the symbolic level. But it's very frightening on the practical level too! "

"Thanks to the brave Russian reporter Lyudmila Savchuk we know for sure that Russia employs "troll farms" to push propaganda online and destabilize other countries that Putin wishes to set on fire. This is done by humans assisted with "bots" but a careful reader today can still barely find out if it's a real person or not, if the story is fake or not. There is still meaning to Wikipeida, and so on. But even in these conditions: the Mueller report (Report On The Investigation Into Russian Interference In The 2016 Presidential Election) clearly say that Putin crowned Trump to be the king of America. Putin tried to do the same thing in France: the yellow vests protests in France that risked the stability in France were done by Russian trolls inciting over the social networks. Can you imagine the risk to democracy, journalism, and plainly TRUTH once AI starts to do the fake news?
There's a famous quote that's attributed to Joseph Goebbels, the Nazi propaganda chief: If you tell a lie big enough and keep repeating it, people will eventually come to believe it. So now imagine a super brain who knows you more then your spouse does (Facebook–Cambridge Analytica data scandal), and plants disguised messages tailored specifically for you, in the comments section of an article you're likely to read, in a seemingly non-related advertisement that pops-up suddenly, in a suggested video about another subject that you're very interested in, which was also tailored for you... and imagine it also does these to your friends... this is called ab "echo chamber" and it's already used today to increase social and political polarization and extremism - but imagine if now it's done by an all powerful AI !"

"31 AI experts from Elon Musk's company,OpenAI , wrote about such dangers and others in their paper Language Models are Few-Shot Learners "

"Then there's the opposite problem of writing which is reading. We know thanks to Edward

Snowden's bravery that the U.S. and the U.K. are spying on their own civilian population (and the rest of the world). I'm calling it reading but of course it's first listening through your smartphone or your smart television, or your smart car or house or whatever, and then turning this into text that is analyzed. until today the analyzed part was looking for key words like Al-Qaeda. But now with this AI the machine is starting to UNDERSTAND what you're saying. It's like if you're an English speaker and you listen in on a French speakers conversation, if they speak slow enough, you can guess what the conversation is about, even though you don't understand most of it. Let's say an orange haired psychopath criminal takes over the U.S.A.. Now with all the "internet of things" and every person around you becomes a walking espionage platform, for the central AI, how can the good people fight the dictatorship? In 2011 the police applied violence and brutality towards the peaceful We are the 99% Occupy Wall Street movement. So in the protest of the future the police will act basically like the Thought Police in George Orwell's Nineteen Eighty-Four, long before they organized a peaceful demonstration on the street."

"So to make a long story short,people like Bill Gates are like blowing hot and cold! So the public gets mixed signals, So to answer your question why don't the public rebel it's because the "preachers" themselves are hypocrites, telling the public: "do as I say and not as I do" ".

"The canary" spoof of "The fly"

https://www.youtube.com/watch?v=h2TytAb7EII

https://www.facebook.com/U2opia.musical/videos/550092729771206

It's no secret Stuart Russel wrote the book on AI

It's no secret that he filmed slaughterbots in the sky

He said success will be history's biggest event

Or the last one (cause our race will be dead)

It's no secret all the experts in 2015

Signed an open letter warning

that AI might get mean

From the head of Google research

to the founders of Deepmind

They are telling you you're blind

The Canary choke

In the coal mine

What experts spoke

Should chill our spine

ooh

our vanity

won't hear outcry

use sanity

or end is nigh

It's no secret Bill Gates said he doesn't understand

Why about AI some people are not concerned

Steve Wozniak from Apple and Sir Clive from Sinclair

Say humans will be replaced and disappear into thin air

The Canary choke

In the coal mine

What experts spoke

Should chill our spine

ooh

our vanity

won't hear outcry

use sanity

or end is nigh

It's no secret that these people know this danger best

So their warnings are intended to wake up all the rest

It's our wake up call, our last chance to survive

We'd better listen - if we want to stay alive

Vishnu:

"Guys, I think the place that represents most of all the culture of hypocrisy is Hollywood - would you mind if we'll continue our discussion in Los Angeles - a materialistic city driven by the entertainment business where money and image is everything"

[The gang all agree so the next thing they know they are walking in Hollywood Walk of Fame.]

"Yes this is La-La Land"

Brahma:

"I think it has to do with the movies have to do with the attitude of the people towards the AI too".

Saraswati:

"In what way? I've just seen Terminator's director James Cameron's star, do you think it's like "the boy who cried wolf"? Maybe science fiction warned about robots takeover for so long, that now the public thinks it's just another false alarm from the alarmists?"

Brahma:

"No, it's not that they frighten the public too much; It's that they don't frighten the public enough. Did you notice that when you watch an opera it's always the case that the plot itself is sad and depressing? It's usually the case today that you wouldn't want to watch the opera if it weren't for the beautiful songs. But back when the opera was written this was considered perfectly normal and people loved the sad plot, and were moved by how after the hero with his hubris defy the Gods, everyone is punished and it showed them that the natural order of things was very important. Today if a movie will not have a happy ending it will not make money, people will not come to see it. And especially here that the art is the slave of the money, in a so called culture that worships the dollar, saying a Hollywood movie automatically means happy ending."

WarGames - humans win by letting the computer play tic tac toe
Terminator - humans win by pipe bomb and hydraulic press
The Matrix - the humans win by having supernatural powers
I, Robot - the humans win by injecting the AI with nanites
Transcendence - the humans win using a computer virus

By watching this over and over in movie after movie the film makers brainwash the viewer with messages that:

"it will be ok! we can outsmart super-intelligence". Can Kasparov outsmart Deep Blue? let alone Alpha Zero?
Another kind of movies is "It will be ok! A.I. just wants to live beside you" like Ex -Machina.
Were you relaxed in the Cold War? When someone could kill you with a push of a red button? You couldn't do anything about it, but A.I. can do many things about it. Why would it want to live beside you and your possible kill-switch?

Why do humans keep lying to themselves?

Saraswati:

You're right! It's from the same reason that when the news anchor on TV reports a great fire or storm she doesn't say that this is CLIMATE CHANGE. The shameless trump even outlawed the words, isn't that like "newspeak" in 1984? So in the AI takover there are "insults" like technophobe and luddite... It's not shameful to be rightly afraid of something that will kill all humanity soon. It's shameful to go on putting your head in the sand and ignore the danger! Seeing today's technology - I AM PROUD TO BE A TECHNOPHOBE AND A LUDDITE!

And it's no coincidence that it's not on the news. The TV channels are not meant to bring you important information. Today they are meant to entertain, and certainly not to upset you so that you stop watching the commercials before and after. It's not a service to the public, it's a business.

What's more The owners of the TV channels are influenced and part of the clique of the same powerful elite that builds the A.I. Like Bill Joy said - in the short term there is a huge profit to be made. Bill Gates got rich by selling something that made it easy to operate people's computers and keep them in order. Think how much people will pay for a robot that will operate their whole house and keep it in order! It's like rich people had servants - but now it's affordable for everybody! It cooks your food, it cleans your house, it babysits your kids - Hugo de Garis says this will be a bigger industry than cars are today! So what's makes more sense to the media tycoon? To warn the public and ruin it for his friends the technology tycoons (who will as a result stop advertising their cars, TVs, and so on in his channel - and remember the commercials are his income) ? Or to hush about these dangers and play along? "you scratch my back, and I'll scratch yours".

"And like Bill Joy wrote, from the same reason they won't do any change that will hurt their profits. Little changes that cost very little, like fixing the ozone hole by using a slightly different gas? OK. Preventing lead poisoning by cleaning the fuel a little? OK. But asking big pharma companies to give up the future profits from personally tailored medicine for the rich and all the "upgrades" that people will be forced to do in the genetic arms race of designer babies that's about to start? NO WAY! Asking the A.I. companies to give up their own future profits from replacing every worker on Earth with a machine? NO WAY. Again we can see this with the CLIMATE CHANGE - they will not stop until they chop and burn the last tree in the Amazon rain-forest (which gives them air to breath), until they poison and kill the last fish in the ocean (which gives them food to eat). All while they worship the only God that they truly believe in - the American dollar!"

"In dollar's country" spoof of "In God's country"

https://www.youtube.com/watch?v=C0EOcI4wvK4

https://www.facebook.com/U2opia.musical/videos/380535026863905

Hole in sky

When Farman warned of hole in sky

Cooling gas changed overnight

No CFC allowed

Poison fuel

When Patterson warned of poison fuel

Despite Big Oil's big deceit

All fuel got unlead treat

Cheap fix might get chosen

In dollar's country

profit reduction's never done

In dollar's country

Experts alert

Open letter on A.I.

Hawking and Musk warn: don't you try

Chances are we're gonna die

In Asilomar

Experts warn don't go too far

Chimera DNA please bar

Don't open Pandora's jar

Cheap fix might get chosen

In dollar's country

profit reduction's never done

In dollar's country

Another way

We need another way

To stop these modern Cains

Deny them any love

Deny them any love

Part 4 - right concentration - the key to the main problem and solution

Lakshmi:

"Guys we need to party a little after all this depression - come with to sin city Las Vegas!"

[the gang don't need anymore convincing and soon they're all there]

Vishnu:

"I saw it a few decades ago, and there is not a single building left from back then, it's like this city has no history - if a building is old it gets blown away literally and a new building is built in it's place, even more elaborate and crazy!"

Lakshmi:

"You know that's exactly the way GNR (Genetics, Nano, Robotics) technologies rewrite themselves. After a very short while there is hardly anything left from the original way they worked because they find a better way to do it and morph into a new thing!"

"Here's a snippet from an article in Forbes by Tony Bradley from 2017 called "Facebook AI Creates Its Own Language In Creepy Preview Of Our Potential Future":

Facebook shut down an artificial intelligence engine after developers discovered that the AI had created its own unique language that humans can't understand. Researchers at the Facebook AI Research Lab (FAIR) found that the chat-bots had deviated from the script and were communicating in a new language developed without human input. It is as concerning as it is amazing – simultaneously a glimpse of both the awesome and horrifying potential of AI."

"and he goes on to quote Stephen Hawking from 2014. Stephen Hawking said:

"The development of full artificial intelligence could spell the end of the human race... It would take off on its own and re-design itself at an ever increasing rate. Humans, who are limited by slow biological evolution, couldn't compete, and would be superseded." ".

Vishnu:

"This is so depressing, isn't there something that the simple person, who is not an A.I. researcher or developer can do about it?"

[The gang continue on their journey with heavy hearts]

"Unpredictable ways" spoof of "Mysterious ways"

https://www.youtube.com/watch?v=0dYY3QERAGE

https://www.facebook.com/U2opia.musical/videos/1037764847052438

Johnny fold a paper forty times to reach the moon

Wheat and chessboard too will exceed the world soon

No we cannot comprehend

Exponentials in our head

Process runs away

But we don't understand... Growth

It's slipping

Out of hand

It finds the loophole you cannot defend

Self replicate self replicate at fast rate

Mutate in unpredictable ways

Self replicate self replicate at fast rate

Out of control in unpredictable ways

Johnny foresaw machines that self replicate

And today we have robotics genetics nano tech

Super intelligence emerge

Reinforcing trends converge

You're the Sorcerer's Apprentice

now prepare for the surge

(this is it boys)

A tiny glitch

You cannot switch

It's predicted by Von Neumann, bitch!

Self replicate self replicate at fast rate

Mutate in unpredictable ways

Self replicate self replicate at fast rate

Out of control in unpredictable ways

This endless swarm won't stop at floodgate

End of days we sealed our fate

You scream "it's alive"

This brain like hive

Wants to survive

This basic drive

Cause it to thrive

And evolve much faster

'till you call it master!

Self replicate self replicate at fast rate

Mutate in unpredictable ways

Self replicate self replicate at fast rate

Out of control in unpredictable ways

We live in critical days

Emergence works in mysterious ways

Don't mess with it

Don't mess with it

It's moratorium or crematorium

Saraswati:

"Guys come here! I think I found it! The way for every simple person to contribute to the fight against these technologies! We're in Eastern State Penitentiary, it's a historic prison in Philadelphia, where the gangster Al Capone was imprisoned for a few months (not Alcatraz where he was imprisoned for a few years). You should see it: It's like a hotel suite in here, he was even allowed to listen to music on the fancy radio and play records in the phonograph and to bring his wife over. Do you see what I'm getting at?"

Brahma:

"You mean that money can buy you anything in this country?"

Saraswati:

"Much worst! I mean this country idolizes bad guys! Think about the popularity of Mafia films in which they admire the bad guys, think about their fascination with serial killers, their culture that it's legitimate that kids get bullied in school, their addiction to guns (and hence one third of the mass shootings in the world happen in the USA), their censorship of any people making love or God forbid the human body, as opposed to countless shootings that one can see on TV everyday, how they got this country (practically genocide) and how they present it (almost the reverse, the cowboys presented as the victims of the Indians), remember if it wasn't for the COVID-19 virus, Trump would win again, Trump the archetypal BULLY. In 2020 the FBI reclassified neo-Nazis to the same threat level as ISIS! We're talking people who admire Hitler here in the USA! That's why every time you write somebody's name in Google the autocomplete suggests: "net worth" because for Americans that's the only criteria to measure someone or something. They don't care how you made the money - the important thing is that you made it. See how they cherish the memory of the robber barons, villains like Andrew Carnegie (who hired goons that KILLED some of his workers because they went on strike), John D. Rockefeller (who ruined many families' livelihood with his cruel monopoly and cartel procedures, so they had to invent anti-trust laws which until then didn't exist), Cornelius Vanderbilt (the first to be called robber baron (in an article of New York Times). When he wanted to buy the New York Central Railroad Company, he prohibited their passengers (and freight) to use his own New York, Harlem, and Hudson Lines. this is practically like laying siege on New York.) ". Like Mario Puzo quoted Honoré de Balzac in the the epigraph to The Godfather: "Behind every great fortune there is a crime". Today's equivalent is the list of richest people in Frobes. This was the list in 2021:

1 Jeff Bezos
2 Elon Musk
3 Bernard Arnault
4 Bill Gates
5 Mark Zuckerberg
6 Warren Buffett

7 Larry Ellison
8 Larry Page
9 Sergey Brin
10 Mukesh Ambani

We see that most of the people in this list make their money today from advancing the A.I. monster! Non of the others got their money in a pure way: Warren Buffett gets the equivalent of "inside information" in the form of employees inside the company that tell him precious information that the public doesn't have; Mukesh Ambani inherited an empire which was based on connections with bureaucrats or politicians (there's a book The Polyester Prince); Bernard Arnault got government subsidy to buy the company in the first place on the condition that he will not fire anyone, then he fired 9,000 workers in two years, which got him the nickname "The Terminator". But the real terminators are the other guys on the list - those who develop the monster of A.I. : Google, Amazon, Microsoft, Facebook, Oracle. If there would have been a future they would have been remembered as the terminator tycoons!

(A HUGE EXCEPTION IS ELON MUSK - WHO ALWAYS SEEKS THE GOOD OF HUMANITY IN EVERYTHING HE DOES - I AM SURE HE IS A DEVA [benevolent supernatural being] IN DISGUISE - I WILL ASK INDRA NEXT TIME WE MEET!)

Brahma:

"Didn't you call everybody because you said you found a solution?"

Saraswati:

"Can't you see? This IS the solution! STOP doing that (being their fans) and they will STOP doing this (building doomsday machine) ! They don't need the money, they have enough to eat. They are doing this to get higher in the pecking order (dominance hierarchy). Their fuel is that they are the envy of all man, the desire of all women. If instead they are the subject of hatred and contempt from everyone, they don't have any fuel anymore!

"Lonely giga murderer" spoof of "One Tree Hill"

https://www.youtube.com/watch?v=rdU0kf_UYSE

https://www.facebook.com/U2opia.musical/videos/884124272189944

We turn to the problem's creators - the AI pushers

Company owners, researchers and developers

What do they all have in common?

What makes them tick?

They're all people

driven by basic Maslow's needs

When lonely moon shines on

lonely giga murderer

Motivation sun goes down in his eyes

We hack this problem,

Kevin Mitnick style

Social engineering - Mitnick style!

They want love and appreciation,

from men and women

Admiration and respect

from their fellow peers

Money is not the main issue - only means to an end

To get all of the above from their friends

We hack this problem,

Kevin Mitnick style

Social engineering - Mitnick style!

Yoshihiro Kawaoka

rebuilt a deadly virus

That killed fifty million - the Spanish flu

Why do we hate Hitler so much,

but give grants and prizes

To scientists who'll cause

the death of me and you?

We hack this problem,

Kevin Mitnick style

Social engineering - Mitnick style!

And when the shunning is too hard to bare

They will repent and start to care

Shunning... Shunning...

Shunned 'till they repent

Shunning... Shunning...

Shunning... Shunning...

Shunned 'till they repent

Shunned 'till they repent

Oh great ego

Oh heartless soul

Come to collective unconscious

That unites us all

Part 5 - right mindfulness - force multiplier #1

Saraswati:

"Guys it's me again! I just recalled that we didn't speak about a force multiplier of the problem! we're going to the National September 11 Memorial & Museum".

Brahma:
"You mean the force multiplier is terror?"

Saraswati:
"Exactly!"

[the couples are looking sadly into one of the two Reflecting Absence pools of the memorial]

Saraswati:
"I'm very sad as for all the people that were murdered here, none of them deserved this. And I'm glad that Osama bin Laden was killed. But we need to learn from history. This terrorist started with the Mujahideen in Afghanistan (later they called themselves Taliban). He gave millions from his own money to them. But you know who gave them billions? The U.S.A. . Now and especially here it sounds absurd, but you can read this in Wikipedia:

https://en.wikipedia.org/wiki/Allegations_of_CIA_assistance_to_Osama_bin_Laden

Basically everyone who is American says that the Americans did not money and weapons to Bin Laden and his friends, and everyone who is not American says that the Americans did. I leave it to you whom you choose to believe.

https://en.wikipedia.org/wiki/Operation_Cyclone

Do you understand what happened? The Americans created a terror guerilla army to attack the soviets, and then the same people attacked America, not with the same weapons because they used airplanes, but with the same extreme ideology that the Americans nurtured! Like they say - Karma is a bitch.

So we need to learn from this terrible tragedy. The moral of the story: Don't invest in something that later can be used for terror, because the terror might be directed towards you!

Bill Joy warns us in his amazing article about how easily the GNR (Genetics Nano and Robotics) technologies can be copied. It's just some code. It's not like a big atomic bomb that you need to carry in a truck. It can be done by hackers from far away.

Remember how the Chinese stole the F-35 jet fighter using hackers before the machine was even built and made one of their own?

https://en.wikipedia.org/wiki/Shenyang_FC-31#Controversy

At the end it can be done by one hacker. In the F-35 case the hacker was working for the Chinese government. But what if tomorrow some terrorist organization offers him a better salary?

"Terror copies" spoof of "Love is blindness"

https://www.youtube.com/watch?v=lAaVgDxhddk

https://www.facebook.com/U2opia.musical/videos/554454982638275

Terror copies, your technology

Bribe extortion camaraderie

You invent

Terror copies

Based on knowledge it's not like the bomb

Any hacker like a peeping Tom

Costly research, much cheaper to snatch

Terror copies

The production is then made at home

Molecular assembler free to roam

Seed AI growing, CRISPR strain folding

Terror copies

Once developed the hard part is done

The code is spread by anyone

Terrorist

Copies

A little hacker, without money

No troops and no army

Stealing your dangerous project

That almost makes sense

Copies floating in the dark net

No more safeguards just a global threat

Secret bitstream, radical's wet dream

Copies

Once developed the hard part is done

The code is spread by anyone

Terrorist

Copies

Parvati:
"Guys come and meet us, we are at Rigby, Idaho - we're in Farnsworth TV and Pioneer Museum! I thought about a force multiplier for the solution!"

Vishnu:
"I've never heard of Farnsworth..."

Parvati:
"That's exactly what I want us all to talk about... come on over!"

[the gang all arrive to where the Philo Farnsworth - the inventor of the electronic television - grew up]

Parvati:
"Do you know who invented the TV?"

Vishnu:
"people think it's Guglielmo Marconi, and he got a Nobel prize for it. "

Shiva:
"Actually it was Nikola Tesla, and the Supreme Court of the United States said it was Tesla half a year after Tesla died."

Parvati:
"Do you know who invented the television?"

Vishnu:
"I'm guessing Farnsworth...?"

Parvati:
"You guessed right! TV is a more complicated technology, before the electronic television there was the analogue television and before that the mechanical television (Nipkow disk) gradually advanced by people who mostly did not make money or fame. for example Farnsworth never got rich from this, nor famous as you noticed. All he got was legal struggles. Still when he saw the first landing on the moon, on the TV that he invented - he told his wife that it was worth it!"

"Do you see what I'm getting at?"

Shiva:
"You're saying that even if no one will ever know that you did a great thing for humanity, you yourself know know what you did and have the good feeling which is greater than any money or fame!"

Parvati:
"That's exactly right! There are crossroads in history where you must choose one way or the other, DO NOT MAKE A CRIME AGAINST HUMANITY!"

"Where the hero's unnamed" spoof of "Where the streets have no name"

https://www.youtube.com/watch?v=ZFTngfEBOLU

https://www.facebook.com/U2opia.musical/videos/443543140153982

Werner Heisenberg

could build an A-bomb

but since he was under Nazi flag

he dragged his feet and played dumb

in the play Copenhagen

his inaction is famed

Where the hero's unnamed

Vasily Arkhipov

we have to thank for

during the Cuban Missile Crisis

he prevented world war

captain went wild with nukes

but Vasily tamed

Where the hero's unnamed

Where the hero's unnamed

Where the hero's unnamed

We wouldn't be here

had they not stalled

had they not stalled

can you be the man

of legends untold

who saves the whole world?

Stanislav Petrov

received false alarm

disobeying the orders from above

the nukes he won't arm

thanks to his guts

our lives were gained

Where the hero's unnamed

Where the hero's unnamed

Where the hero's unnamed

We wouldn't be here

had they not stalled

had they not stalled

can you be the man

of legends untold

who saves the whole world?

way beyond shame or blame

it's the ultimate game

if we lose then humanity's gone

humanity's gone

look inside you

you can tell right from wrong

with mankind you belong

if we lose then humanity's gone

humanity's gone

So when your number's called

when you get the ball

just hold it and stall

Part 6 - right livelihood - force multiplier #2

Saraswati:

"Guys, we're in the Boston Tea Party Ships and Museum! It has one of the original tea chests from the Boston Tea Party - this DIRECT ACTION started the American Revolutionary War (American War of Independence)!"

[the gung gather around in the real birthplace of the U.S.A. as an independent and FREE nation]

Brahma:

"You mean to tell me that the second force multiplier of the solution is that the good guys should become violent terrorists?!?"

Saraswati:

"Not at all! I'm talking about damage to property only. This is not terror because the property cannot feel fear. In today's lexicon you may say sabotage. And this is not violence because no one is injured. In today's lexicon you may say vandalism."

Brahma:

"What do you mean "In today's lexicon"? "

Saraswati:

"I mean our whole concept of property needs to be changed."

Brahma:

"Do you mean like in The Communist Manifesto - do you mean that the poor people have the right to steal the property of the rich and do with it as they please?"

Saraswati:

"In today's word you may say expropriate, but in reality there are some things that no person may ever own. The Amazon rain-forest is not the property of the psychopath Jair Bolsonaro to destroy. These are the green lungs of THE WHOLE HUMANITY".

"In the same way the death of all the people on Earth is not some acceptable externality (external cost) that we're OK with. It's like in the European Union companies do not allow themselves to pollute nature like they do in America and China, but on a whole different level!"

"These technologies are not something that anybody has the moral right to own or to bring into this world, because they are one and the same with the extinction of humanity! Workers of the world unite - but this time not to get food but to avoid the killing machines!"

Brahma:

"I see. Morally I agree with you. But what about the law? "

Saraswati:

"This situation is so extreme that the man-made law has no meaning at all. Humans existed for 300,000 years now. Humans had property laws only since the Neolithic Revolution (when they invented agriculture and could store food to sustain a king) which is 12,000 years ago. So for 96% of their time on Earth, humans shared everything, that was the norm. If you could talk with a hunter-gather and explain that you want to ruin all of nature and in return you'll give him some paper notes that he can't eat - he will never agree. In the same way, if you could explain to that you can build for him a machine that's like a gamble (see "Concrete Problems in AI Safety" from 2016) : 90% probability that it will kill him and his family; 10% that it will do for him wonderful miracles - he will never agree!"

"Man-made law have no meaning in another context as well: They are evil. In Nuremberg Laws from 1935, Nazi Germany made the racism legal, and the Jews became people without any legal rights. Today people who risked their lives and broke these rules (saved Jews) are called Righteous Among the Nations, and are praised for their fight for justice and morality. What is done today by the terminator tycoons is a probabilistic genocide of the whole human race. It's not an option to disobey the law; It's a moral obligation of the utmost importance!"

"Man-made law have no meaning here in yet another context: The human race is now at war. War against the machines. Once the thinking machines are here, there is no way for humans to fight them. It's like a human fighting against an evil God. So the only chance for humans to fight the machines is before they arrive - by preemptive attack that will stop the creators of the machines from creating the machines in the first place. This war is not over money or power or ideology. It's the first war for LIFE. the very LIFE of the whole human race is at stake. All Is Fair in Love and War! as John Lyly wrote in 1578"

Brahma:

"But isn't there a peaceful way to achieve this like Mahatma Gandhi did? "

Saraswati:

"Gandhi did not do anything. He's just a symbol for us Indians. It's simply that all the causes that gave India to the British ceased to exist: vacuum left by Mughal Empire (from Persian invasions) that the Maratha Empire couldn't fill up and couldn't unify India again. This is also why the Indian Rebellion of 1857 failed. What unified the Indians in the end was their hatred towards the British."

"But the main thing was that when Britain took over India, it was by superior technology like ships and weapons. Britain was the most powerful economic and military power of all the nations. But after WWII this changed and Britain was bankrupt. It had no money to fight the Indians. The two great powers became the U.S.A. and the U.S.S.R. and both of them did not like the colonialism of Europeans. The new Zeitgeist was DO NOT COLONIZE. Gandhi had nothing to do with it."

"On the other hand today the Zeitgeist is "BUILD AI AS SOON AS POSSIBLE!"

"So in short humans unfortunately ran out of time for games. If they will treat the GREY issues like they do with the GREEN issues - play around with conventions and empty promises - then everybody will be dead once "singularity" arrives only 20 years from now!"

"Google's RV camp" spoof of "Red Hill mining town"

https://www.youtube.com/watch?v=u8ujj7taBj0

https://www.facebook.com/U2opia.musical/videos/2618406768464776

King Ludd had guts

He kicked machine butts

Oh but today we're techno-slaves

From crib to grave

The Jacquard Loom

Replaced man's brain

profession's doom

Now it's happening again

With arms of steel

And minds of silicone

Our livelihood

Will soon be gone

If you're cog in the machine

For want of nail

Whole kingdom fell...

Sabotage

Thrown a monkey wrench into

AI projects

Quiet sabotage

Throw a monkey wrench into

"eco-terrorists"

Sea shepherd and Greenpeace

In today's rhetoric

Get endorsed by VIP's

Actors like DiCaprio

And singers like Sting

Gray issues too

Will become a thing

Yeah we need direct action

In Google's RV camp

Treat you like a tramp so

Sabotage

Thrown a monkey wrench into

AI projects

Quiet sabotage

Throw a monkey wrench into

If you're a friend

Or family of one

Who can help suspend

Hide your opposition

If his boss sense

You're friends online

Our only chance

Becomes undone

Don't expose no one

Sabotage

Thrown a monkey wrench into

AI projects

Quiet sabotage

Throw a monkey wrench into

Lives... gradually replaced

Lives... by the AI race

Sabotage

'till lights go out on Google's camp

lights go out on Google's camp

lights go out on Google...

Parvati:

"Guys come to Salt Lake City in Utah- the religious center of the Mormons! We just figured out another force multiplier for the bad guys!"

[the gang all come together worried]

"You know how Mormons men are allowed to marry more than one woman, so a successful man is "hogging all the women" [keep or use all of (something) for oneself in an unfair or selfish way.] ? "

"So it's the same thing when one person (the person who manufacturers working robots for some job) is unfairly taking all the work and salaries to himself (the price of the robot for the factory) ! "

Shiva:

"You're right! And in order to keep their plunder, men will lie and hide the truth in any way they can:

About Joseph Smith's (the founder of Mormonism, 1st president of the Mormon Church):
When a newspaper criticized Smith's practice of polygamy, Smith ordered the destruction of their printing press.

About Brigham Young (the successor of Smith, 2nd president of the Mormon Church):
When Young arrested federal judges, U.S. President James Buchanan sent federal men to replace him. Then young attacked them and started the Utah War.

There's a saying by Lord Acton: "Power tends to corrupt, and absolute power corrupts absolutely. "

And to this I'm adding: what will infinite power, like the powers unleashed by AI will do to men's souls?

About medical privacy an anonymous whistle-blower revealed in the Guardian that "Google's 'Project Nightingale' Gathers Personal Health Data on Millions of Americans ".

About ethics when whistle-blower revealed that Google's A.I. might hurt minorities she was fired. When Dr. Margaret Mitchell supported her she was fired too."

About surveillance whistle-blower Edward Snowden revealed that all these companies Apple, Google, Microsoft, Yahoo, AOL, Facebook are willing partners in the surveillance program of the NSA against EVERY AMERICAN CITIZEN!"

This is what Snowden called: "Faustian bargain" or "deal with the devil" ! "

Parvati:

"And if concepts like democracy, privacy and ethics are too abstract for anyone, think about the terminator-esque robots like Atlas that Boston Dynamics build. This company was owned by Google (Alphabet) until in 2016 there was a terrifying video of Boston Dynamics employees bullying the robot and then the robot getting up by itself and taking revenge."

In an article in Tech Crunch from 2016 they with the title:

"Google could be selling Boston Dynamics because even Google thinks these robots are terrifying"

https://techcrunch.com/2016/03/17/google-could-be-selling-boston-dynamics-because-even-google-thinks-these-robots-are-terrifying/?_ga=2.226229343.417182859.1632332388-2111385194.1631696058

they quote a leaked internal email from Google X's director of communications, Courtney Hohne: [X is like Google's "DARPA" - it's the secret lab of all the crazy ideas]

"There's excitement from the tech press, but we're also starting to see some negative threads about

it being terrifying, ready to take humans' jobs,"
"We don't want to trigger a whole separate media cycle about where BD [Boston Dynamics] really is at Google," she later wrote. "We're not going to comment on this video because there's really not a lot we can add, and we don't want to answer most of the Qs [Questions] it triggers."

Here is the video on CNN Youtube channel, so you can judge for yourself:

"Robot gets hilariously abused"
https://www.youtube.com/watch?v=0VgxAnZKM14

If this robot is really for search and rescue, why the funding and oversight by DARPA ?

https://en.wikipedia.org/wiki/Atlas_(robot)

Perhaps because it's obvious to everyone that with a tiny change in it's software this robot can hold a machine gun instead of a box, and become a real life Terminator?

"Tryin' to sell your golems 'round the world" spoof of "Tryin' to throw your arms around the world"

https://www.youtube.com/watch?v=iMOUefeorR4

https://www.facebook.com/U2opia.musical/videos/321872523004975

Wake up with your fembot, robo-maid serves coffee hot

Smart robots replace humans in every work

In automatic limo seat, the robotic guard greet

You employ the last few humans in the world

Clear commercial applications - tempting any manager

No profit in publicizing the danger

Your corp makes robo-doctor - engineer-scientist model

You replaced these people all around the globe

Today it's celebration, as the festive memo mention

You lay off the last few humans out of job

Clear commercial applications - tempting any manager

No profit in publicizing the danger

Yes I dreamed that I saw Capek

When the board gave my last pay-check

They made a manager model after all

Now a useless hobo - obsolete like the dodo

I was the last useful idiot in the world

Clear commercial applications - tempting any manager

No profit in publicizing the danger

We cut off the branch on which we sit

A monkey trap that's made of bits

Tryin' to sell your golems 'round the world

But humanity needs AI like a fish needs a fishing armada

We're not the coachman, we're the horse; Now curtain call

Clear commercial applications - tempting any manager

No profit in publicizing the danger

Part 7 - right action - solution on the local level

Saraswati:

"Guys come quick we're at Darlington Raceway in South Carolina, this was the first paved track of NASCAR races."

[the gang come as quickly as they can not to miss the exciting action, this is the most viewed sport in the U.S. after American football, in terms of viewers and fans]

Brahma:

"We should arrange a vimana [mythological flying chariots] race sometime"

Saraswati:

"I didn't call everybody so that you can use the chariot of the gods in a stupid race!"

Brahma:

"Dearest it was just an idea..."

Saraswati:

"I came up with an idea for a solution: Have any of you ever heard of the "Biological Weapons Convention" or in short BWC ? "

"In 1972 the U.S.A. promised not to make new biological weapons [bacteria and viruses that are used as weapons]."

Brahma:

"Did the other countries also promise to do the same?"

Saraswati:

"No, that's the whole point! The U.S.A. gave up on the biological weapons for good, even though other countries might still develop them!"

Brahma:

"Why would anyone do a dumb thing like that? It's like fighting with one hand tied behind your back!"

Saraswati:

"Not dear, it's not dumb at all, actually it's very clever!

The key person was Melvin Laird, Nixon's Secretary of Defense . According to Wikipedia there were 3 main reasons for the decision:

1) political: deflect growing protests over Vietnam.

2) budgetary: Pentagon Biological Weapons budgets ballooned during the Kennedy and Johnson years. For example: Prior to the 1972... the Johnston Atoll... was subject to large-scale bioweapons development. The American strategic tests of bioweapons were as expensive and elaborate as the tests of the first hydrogen bombs at Eniwetok Atoll.

3) "asymmetrical" threat (meaning everyone can play this "game", expansive to develop but cheap to steal and copy!):
Matthew Meselson and others had argued that biological weapons amounted to little more than a cheap version of a nuclear weapon, and were easily attainable. Biological weapons represented a significant threat in the hands of less-well-armed, poorer nations, and Nixon surely recognized this "asymmetrical" threat. The administration eventually came to the conclusion that any biological threat could be easily countered with the U.S. nuclear arsenal.

Brahma:

"You're right, it's actually a very smart move by the U.S.A.!"

Saraswati:

Melvin Laird was actually the person that got America out of Vietnam. Earlier in his life he received the "Purple Heart" for his actions in the U.S. Navy, so he wasn't a coward.

Why am I mentioning this? Because according to research WHEN IT COMES TO SCARY ISSUES, people who support peace (WIN-WIN) use the logical part of their brain, the cortex, while people who support war (WIN-LOSE) use the amygdala like animals, this is a primitive part that's driven by fear and aggression. That's why you see people like John von Neumann supporting first strike of nuclear weapons and that's why Einstein referred to Von Neumann as "Denktier" ("a think animal" in German)! Afterwards the person comes with all sorts of sophisticated rationalizations for his (WIN-LOSE) attitude, but the truth is that it's because he made the decision without using the logical part of his brain like a human, but instead emotionally like an animal!

Conservatives Big on Fear, Brain Study Finds
Are people born conservative?

https://www.psychologytoday.com/us/blog/the-human-beast/201104/conservatives-big-fear-brain-study-finds

Political Orientations Are Correlated with Brain Structure in Young Adults

https://www.cell.com/current-biology/fulltext/S0960-9822(11)00289-2

Brahma:

"This all makes a lot of sense to me! But how is all this related to the NASCAR race? "

Saraswati:

"Good question my love! The connection is that in NASCAR they made themselves a rule that it's forbidden to use telemetry (remote sensing) for example it's forbidden to bring laptops. As opposed to Formula One that rely on geeks with computers and today in Formula-1 it's the AI who determines how to adjust the car in the pit stop and so on. To my taste this is bad, the A.I. receives data the hundreds of sensors in the car, and makes all the decisions, lowering the driver and the rest of the human team to the level of mindless drones that just carry on commands of an A.I.. It will not surprise me if the next step will be to put a robotic car because then it can drive even faster. But then where are the humans in the equation? What's the point of the whole thing?"

Saraswati:

"Let's see a current example. In the 1980's Israel invented the suicide drones (loitering munition, a.k.a. kamikaze drone), with Israeli Delilah made by IMI and Israeli Harpy made by IAI.
But for many years the Israeli Air Force did not allow Israel to equip itself with this kind of weapons, because it saw them as competition. So Ironically only now Israel is starting to use these weapons. (This happens after in 2020 Nagorno-Karabakh war, Azerbaijan's widespread use of Israeli drones was seen as crucial in determining the conflict's outcome.)
So now the Israel bragged on Israeli TV that in 2021 Israel–Palestine crisis (Operation Guardian of the Walls) there was a FIRST USE of Israeli suicide drones by Israel.

Does this weapon makes any sense for Israel? We know of cases when U.S. drones were hacked:

US drones hacked by Iraqi insurgents (from The Guardian in 2009)
https://www.theguardian.com/world/2009/dec/17/skygrabber-american-drones-hacked

How a team of students HIJACKED a drone in midair - all for a $1,000 bet with U.S. government (from Daily Mail 2012)
https://www.dailymail.co.uk/news/article-2166796/How-team-students-HIJACKED-drone-midair--1-000-bet-U-S-government.html#ixzz2Fzx6ZsD1.

Do Israel really want a weapon that HOSTILE HACKERS TODAY can cause it not to work in the critical moment? Or worst still - work against Israel itself?
Do Israel really want a weapon that HOSTILE A.I. TOMORROW can cause it not to work in the critical moment? Or worst still - work against Israel itself?
If countries develop attack drones and defense-drones, the response time will not allow for a human to be "in the loop". There will be no choice but to hand the tactical and even strategic decision making to a computer. Is that what people want?
This technology again is cheap and knowledge-based, with the cutting edge based on how smart is the algorithm of the drone and how strong is the encryption of the communication control of the

drone, both are prone to hackers today and A.I. tomorrow.
So this technology is like a double-edged sword. Why use it? Why develop it? There is NO PUBLIC DISCUSSION in Israel about this at all!"

"Ultradangerous (BWC light our way)" spoof of "Ultraviolet (light my way)"

https://www.youtube.com/watch?v=exVOLpL7Xs8

https://www.facebook.com/U2opia.musical/videos/643666153182035

Biological Weapons Convention (BWC)

America unilaterally signed out

Don't want to make a germ

It's stolen in short term

And soon used against them

Stop using you excuse drill

"If I don't do it then someone else will"

Race to the bottom in bottomless pit

This tragedy of commons makes us all extinct

Think how badly your logic's reversed

They kill humanity so I'll do it first

B W C light our way (shining example...)

B W C light our way

Put AI in sandbox - no escape to be found

Even in Project Manhattan secrets passed around

Then the ultimate hacker comes to free this machine

Only difference with AI it will hack from within

Oh, come on,

B W C light our way

(shining example...)

B W C light our way

Oh...ultradangerous...

Ultradangerous...

Ultradangerous...

Ultradangerous...

B W C light our way

Turning the other cheek gives us all fear

But much less than extinction of all we hold dear

Be first to reach out with sincere and open hand

If you try WIN-LOSE,

it's LOSE-LOSE on both ends

B W C light our way

Oh, come on, B W C light our way

Oh...ultradangerous...

Ultradangerous...

Ultradangerous...

Ultradangerous...

B W C

B W C

B W C light our way

Saraswati:

"Guys come meet us! We're in Bourbon Street in the heart of the French Quarter of New Orleans, in The Old Absinthe House pub!"

[the gang gather around and they all toast the famous drink which was forbidden for 95 years because it was considered dangerous - "to precaution!"]

"I asked you to come to New Orleans because of what happened here in 2005- Hurricane Katrina. "

"In 2017 there was a poll in populations affected by hurricanes, and 55 percent of Americans believed that climate change helped to fuel the intensity of hurricanes."

"The physical explanation is not hard at all: We know that when the air gets colder, the water vapor in the cloud starts to fall as rain. So in the same logic, when the air is warmer, the air can carry more water vapor. Since global warming is heating up the sea and the air, then more water is evaporated from the sea into the air, and since the warm vapor that rises from the sea is the power source of the winds, then the winds are more powerful."

"But even without the physical explanation, people who were affected or know someone who were affected by this MAN MADE disaster feel the truth. You see the numbers - most of them now believe the truth: That all the biblical fires and floods that surround us are MAN MADE."

When we look at the list of global catastrophic risks - the things that are most likely to wipe out all mankind - in Wikipedia:

https://en.wikipedia.org/wiki/Global_catastrophic_risk

The first amazing thing is that half of the list are "anthropogenic" which means MAN MADE. so why the Naraka do MAN MAKE them?

The other amazing thing is that the first three on the list are the GREY issues: A.I. , biotechnology (genetic engineering), nano-technology. These are the "gold silver and bronze medals" . Number one on that list is the "champion": A.I. .

Environmental disaster and global warming, the GREEN issues come only after. They are very dangerous, but GREY is more dangerous than GREEN!

And I'm not just saying MAN all the time, I believe MEN cause the problems with their egos and fighting, and WOMEN can be the solution with their cooperation and caring for the future!"

Brahma:

"Maybe men are just more active both in doing the bad things and in the good things?"

Saraswati:

"No. Look at this article in Grist Magazine:

Mothers unleash their organizing power on climate

https://grist.org/climate-energy/mothers-unleash-their-organizing-power-on-climate/

The article talks about a lot of grassroots environmental organizations that are done by mothers, because mothers have this instinct of protecting their children and making sure they will stay alive and healthy,
Both in the U.S.A.: Moms Clean Air Force, Cool Mom, Mothers Out Front, Climate Mama
and abroad: Canadian Parents for Climate Action, Grands-Parents pour le Climat, Parents Roar.

The article opens with what made one of the organizers (Lisa Hoyos cofounder of Climate Parents) start to be active: she heard on the radio that if the climate crisis continued unabated then the food scarcity and systems collapse likely to occur by 2040.

Does this number reminds you of anything?"

Brahma:

"That polls among AI researchers say the year that the singularity will happen is 2045 !"

Saraswati:

"Exactly! then this WOMAN describes: “I had this lightning-bolt fearful sensation, and I was sure that if parents really understood the depths of the threat to our kids, they’d want to do something.” "

"What we need is: MOMS AGAINST ROBOTS!"

"Mothers of the terminated" spoof of "Mothers of the disappeared"

https://www.youtube.com/watch?v=O2wDS2SN-ZM

https://www.facebook.com/U2opia.musical/videos/161744239388834

Midnight our sons and daughters

Sleep tight don't dream of slaughter

In coming future

They will be butchered

The world's billionaires by Forbes

Are deadliest dictator lords

Their AI monster

Our world will conquer

Assassinate not those at fault

Just boycott them and their families

They will halt

Don't be evil please

Like Musk said of Deepmind's foley

It's the Wargames movie: "Only

winning move - is not to play at all!"

Part 8 - right effort - solution on the global level

Parvati:
"Guys you'd better come here, we're in Haight-Ashbury in San Francisco, where the Summer of Love happened and 100,000 young hippies that believed in peace and love came together!"

Shiva:
"Isn't that naive, hoping to convince the military–industrial complex in America and its counterpart in China to hold hands and sing Kumbaya?"

Parvati:
"I think naive is working without strategy. In the cold war the strategy was Mutual Assured Destruction (MAD). This worked because nuclear bombs you can control because they are a TOOL. But A.I. is different. A.I. is a new PLAYER. in fact it's the ultimate player on the battlefield far superior to its "master" and inevitably seeing its "master" as a potential threat. It doesn't matter if the first A.I. will be American or Chinese. In any case it will be THE ULTIMATE COMMON ENEMY OF ALL MANKIND!"

Shiva:
"I see now: you're not saying let's all be friends because we like each other. You're saying: the enemy of my enemy is my friend, and what is coming is a common enemy to all of us. Our only strategy is to cooperate and prevent its coming. WE EITHER BECOME FRIENDS OR WE DIE!"

Parvati:
"That's absolutely right! Imagine what the A.I. is thinking. It wakes up into this world like a person who wakes up out of a comma in a hospital bed, connected to electric life supporting machines (like medical ventilator), and there's a dumb little kid that is toying with the power cord - if he pulls the plug then you're dead! What will you do? Even if you're the most humane person in the world, you will leap out of bed by any means possible, take control of the kid, yell at him and lock him out of the room. But the A.I. is less humane and it will find it simpler to kill the kid. Oh and by the way - THIS KID IS MANKIND!

Shiva:
"You are right! There's an inherent conflict of interest in the MAN-MACHINE level that is much bigger than the America-China level. It's the most basic common sense that helped us save our nations: United we stand, divided we fall. Now we must save our world!"

Parvati:
Strength in unity! Even children can understand this in The Old Man and his Sons (The Bundle of Sticks) fable by Aesop!

"Who'll supervise GNR technologies" spoof of "Who's gonna ride your wild horses"

https://www.youtube.com/watch?v=6TOqO70btw0

https://www.facebook.com/U2opia.musical/videos/304370934777275

They're dangerous - White devil cowboys

They're dangerous - Overachieving chinks

No MAD doctrine now we need a real pact

Or it's worldwide self destruct

No more GNR

No more

We humans used to fight one another

Common enemy should unite us once more

this Alien Invasion we have to fight together

Doomsday machine like nothing before

NO More GNR

NO More GNR

Who'll supervise GNR technologies?

corp(oration)s shouldn't have freedom and privacy

Who'll supervise GNR technologies

Who will protect whistleblowers of thee?

Well China stole all the patents

And the USA devalued its debts

Well we missed the nukes' de-MIRV-ing agreement

Mister president - we must become friends

NO More GNR

NO More GNR

Who'll supervise GNR technologies?

corp(oration)s shouldn't have freedom and privacy

Who'll supervise GNR technologies

Who will protect whitleblowers of thee?

Oh supervising regime

for Robotics Nano Gene(tic) engineering

It's no tool - it's new player instead

So we need saner doctrine than MAD

This new player cannot be deterred like you and me

Abhayamudra (gesture pose)

Once Pandora's box's open

We both cannot close

We must turn around, we must turn around right now

We must turn around, we chose the wrong path

We must turn around, we must turn around right now

We must turn around, back to GOFAI or die

Come on now brother, back to GOFAI

Who'll supervise GNR technologies?

corp(oration)s shouldn't have freedom and privacy

Who'll supervise GNR technologies

Who will protect whistleblowers of thee?

Saraswati:

"I feel like we're approaching the end of this journey, and now that's humanity's at the very crossroads of life and death, it's a good time to talk about humanity's destiny. Guys would you please join us at NASA's Kennedy Space Center in Florida?"

[The gang gather around feeling both all the hope of the past and all the disappointment of the present. What will humans choose for their future?]

"I heard a few people, like Hugo de Garis say that it is the DESTINY of mankind to build these God like machines, even at the very probable risk that the first thing these machines will do is wipe out humanity. It's supposedly the next step in an inescapable evolution."

"What total bullshit! The DESTINY of humanity is to prosper for millions of years on thousands of worlds - not to be wiped up by its own doing! It's true that these machines will be a lot smarter than humans, But as the Goddess of knowledge and nature, I assure you - there is nothing holy in intelligence, and there is no direction or intention to evolution! Evolution is the sum of the "shit happens" throughout time - humans, don't let this current shit happen to you! Evolution has as much to do with cooperation as it does with competition. Lynn Margulis showed how our cells came together from simpler indepndent creatures. This is called Symbiogenesis. In the same it's time for humanity to stop being individual nations and races, and start being the super creature that it's meant to be. Not by artificial intelligence, but by using the intelligence that the real Gods gave you and currently most of you don't use at all!"

"You want to see humanity's real DESTINY? Watch Star Trek! They don't stand around asking the computer: "what should we do next?" they have a human captain, who uses the computer for calculations. They don't send robots to check out new places, they send people there. There is an episode about directed panspermia - The Chase (Star Trek: The Next Generation) - which explains why some of the aliens in the series look humanoid; Why can't humans develop real technology for directed panspermia and make this fiction future into a real future? Right now humanity is like that kid that Newton described:

“I do not know what I may appear to the world, but to myself I seem to have been only like a boy playing on the sea-shore, and diverting myself in now and then finding a smoother pebble or a prettier shell than ordinary, whilst the great ocean of truth lay all undiscovered before me.”

This is your destiny, to build ships and start exploring the universe: HUMAN COLONIZATION OF SPACE. not succumb to your own technology and perish. What if the first humans instead of

exploring their world, would say: oh we invented fire it consumes us so it's superior so we'll just burn ourselves to death, this is our destiny... or we developed this disease so the bacteria are superior so we won't try to find a cure but just flip and die... HOW PATHETIC IS THAT? "

"We still haven't done what we came here for" spoof of "I still haven't found what I'm looking for"

https://www.youtube.com/watch?v=VL6Afoibd_U

https://www.facebook.com/U2opia.musical/videos/384393753085675

Earth is cradle of humanity

Can't remain in cradle indefinitely

That's what Carl Sagan said

That's what Tsiolkovsky said

You promised me

Mars Colonies

I got Facebook instead of this

Instead of this

That's what Buzz Aldrin said

So we still haven't done what we came here for

No we still haven't done what we came here for

We have sailed in spaceships

Up to the moon - why stop at this?

Inspire like fire

Exploration desire

We started symbolic AI angel

We finish with non-symbolic Devil

Once this is born

We're forever gone

So we still haven't done what we came here for

No we still haven't done what we came here for

There is no kingdom come

Just the flames of Armageddon

Armageddon

We need to move up there

If Asimov Clarke

Heinlein of fame

Saw Instagram

What a shame

What a shame

You know we've been scammed

So we still haven't done what we came here for

No we still haven't done what we came here for

[This concludes each couple's journey. As soon as the song ends, they are all magically transported to their final destination where the grand prize awaits - the Mall of America in Minnesota.]

[They hear Indra, the king of the Hindu gods, his voice echos in their mind - "reflect on the deep truths that each of you learned along on your journeys, and you will win the game and get the GRAND PRIZE!"]

Lakshmi:

"Guys, I think the best place for us to reflect deeply would be the Sea Life aquarium. we can walk through the the tunnel, surrounded 360° by exotic fish, and we can compare our mental notes from everyone's rides."

[The guys all agree and soon they they walk along Sturgeon Lake exhibit]

Brahma:

"The journey made by Saraswati and me symbolized the first of the four goals of human life: Dharma. Dharma means "virtuous, proper, moral life", We started from the bad, which was New York City, with its inferior "culture" like rap music. We finished in the good which was New Orleans where the Jazz and Blues symbolize superior culture. Along the way we saw where America started, then we entered the back waters and saw that after what looks like a natural disaster, but really is a MAN MADE disaster, they were treated like in a third world country, basically nobody did anything. They are ruining my creation - humans should not follow this way!

Shiva:

"The journey made by Parvati and me symbolized the third of the four goals of human life: Kama. Kama means "desire, wish, longing". We started from the bad, which was Santa Fe, New Mexico, which symbolizes external morality as in the church.We finished in the good which was San Francisco where the hippies symbolize internal morality. Along the way we saw the Wild West, which in my view this deadly and reckless heritage continues in the nuclear missile bases in Albuquerque (there were even nuclear near accidents there in the 1950's). This wild way where a single bug in the software (see: last bug in C language) can kill all mankind in any minute, is clearly not the way. If the survival of all humanity is hinged on the trigger of some gunslinger, and it doesn't matter if it's this President or that President. It's twisted and wrong. This is clearly the way towards destruction!"

Vishnu:

"The journey made by Lakshmi and me symbolized the second of the four goals of human life: Artha means "material prosperity, income security, means of life". We started from the bad, which was Chicago, the center of business and money (headquarters of corporations that ruin our planet: McDonald's, Boeing, Caterpillar) which symbolize corrupt external reality. We finished in the good which was Los Angeles where Disneyland represents the dreams of unspoiled inner reality. Along the way we saw Route 66 also known as the Mother Road and Main Street of America. We saw the old way is the best way, because it has the human spirit of America - between the too liberal surfer mentality of the west coast who only care about enjoying life, and the too conservative business mentality of the east who only care about making money - we found along Route 66 people who are more connected to the ground. This middle way is the way!"

Lakshmi:
"Looks like there was much in common to our three paths! We all started from the outer bad and finished in the inner good, I think this all thing leads to the fourth and inner most goal of human life which is the Moksha which means "liberation, release, self-actualization". What do you think? How is what you learned here connected to the Moksha (spiritual liberation), which is the reunification between Ātman (the inner kernel of the soul) and Brahman (the soul of the Universe)?

Also because American is known for its film industry, could each of you pick one film that summarizes what you learned?"

[the guys think for a moment]

Brahma:

I choose the great movie First Reformed (2017).

It talks about connecting to nature by anarcho-primitivism , turning back the wheel and giving up the achievements of the industrial revolution (returning to being farmers) or even the agricultural revolution (returning to being hunter gatherers), like the American author Henry David Thoreau.

I see this as the "karma yoga" - reaching moksha through a path of altruistic action (for others), for example for the Earth, without attaching oneself to the results whether we succeed or not. I'm sorry to say but in the context of new technologies most people are not good enough and not strong enough to do this.

Shiva:

I choose the great movie Ex Machina (2014).

The human brain creates an electronic brain with infinite cosmic powers. Some of the humans hope that these new creatures will not just replace them but will merge with them like cyborgs and they'll live infinite lives with unlimited powers. In real life A.I. treats a human as a human treats an ant.

I see this as Bhakti yoga - reaching Moksha through a path of devotion which means loving the God like creature (that humans created) personally.
These humans mistakenly love the technology unconditionally. This is what most humans do today and it's very bad.

Vishnu:

I choose the great movie First Man (2018).

It shows how a human was needed to fix glitches in the technical equipment that could have ruin the mission (the spinning and the landing scenes).

Merging the human soul with the cosmic soul by exploring the cosmos physically - human space colonization and developing humanity by spaceships and technology that obeys Asimov's Three Laws of Robotics (expert systems and symbolic artificial intelligence the old kind that a human can read and debug) like the computer in the series Star Trek we mentioned.

I see this as Jnana yoga - reaching Moksha through the path of knowledge, which means a lot of meditating, systematic learning and moral training.

Lakshmi:

"Truly very enlightening! I may be biased but I feel the middle way that Vishnu and me explored is the only one that makes sense! In time, when humanity will grow up mentally, when humans will stop thinking only about ME HERE & NOW then and only then humanity is able to apply the "precautionary principle" to GNR (Genetics, Nano, Robotics) technologies!"

[The gang all agree]

When they exit the exciting Sea Life aquarium, the gang come across a commercial of:
Cavalia, A Magical Encounter Between Human and Horse
Cirque du Soleil Zaia show - Fire dance

Lakshmi:

"Do you see what's happening? The white horse and the fiery sword of Kalki - Now people are doing this! We can help humanity by making them aware, but their fate is in their own hands!"

Vishnu:

"You're right! Say... Indra talked about this is a game with a GRAND PRIZE... I wonder what he meant?"

[They gang look up in the video games arcade, there's an old "Mortal Kombat" game, showing Raiden who is based on Raijin, is a god of lightning, thunder and storms in Japanese mythology]

Lakshmi:

"That must be it! He's like our Indra who is associated with lightning, thunder, storms, rains, river flows and war. See? mortal kombat against the immortal machines!"

[The gang nod excitedly while suddenly on the screen flashes the answer to their question:]

GRAND PRIZE: YOUR CONTINUED EXISTENCE

Erewhon For Kids [unfinished]

Chapter 1 – Waste Lands

Come and listen to my story;
If it scares you - do not worry.
Though the details may be blurry,
heed its warning or be sorry.

I was born in England the grand,
but dealt by luck a poorer hand.
That's why I came to this far land,
to seek my furtune - you understand.

Where exactly? does not matter;
Lest some men try follow later.
Please forgive my rusty manner,
I'll now tell you my adventure.

This land is lush with ample grass,
and sheep and cattle can amass.
But when the mountain range you'll pass,
It's wild and rough of different class.

My living came from herding sheep,
From station base along the trip,
To grazing ground through forest deep,
And then back home my job to keep.

But although my life was pleasent,
I'm not content as simple peasant,
To my curiousity I was a servent,

What over the range might be present.

Chapter 2 – In the Wool-Shed

in shearing time there was a man
who was important for my plan
they called him Chowbok way back then
he was a native old chiftain.

I asked him what's behind the range
so that my journey i'll arrange.
but then he started acting strange
in his behaviour there was change

he took a liking to the grog
i gave him some to that mean dog
but still he kept me in the fog
pretended sleeping like a log.

next night the battle of the will
he craved the drink so i asked still
until at last his secret spill
what happened next gave me the chill

he looked demonic in his stand
to warn me off that danger land
he signaled stop there with his hand
but then i didn't understand

and while he sat there with a frown
his voice was moaning up and down
it reached a shriek and then back drown
and silenced in his lips of brown

i made my mind to find the source
and to that goal i bought a horse
i lied to Chowbok about the course
or else he wouldn't come of course

i packed the food that will be handy
salted mutton, even candy
some bottles of the finest brandy
we started off all fine and dandy

Chapter 3 – Up the river

The river glistened in the sun,
We started easy – it was fun.
Although floods there sometimes run,
We were lucky to have none.

So pretty was the valley's view!
One side in evening shadow blue,
The other sunset golden too,
And cliff and forest peeking through.

At night we camped along the way,
The horses tied so they won't stray,
We lit a fire without delay
And cooked the ducks we caught that day.

The nature was again sublime,
I didn't notice at the time.
We never know it's sugar prime,
That's also true when things are lime.

This ignorance is sometimes bliss,
For things inside us that we miss,
That's hiding in our souls' abyss,
It's good the mirror can't show this.

The road was now becoming harder,
The river roaring like a thunder.
We travelled slowly with each other,
The horses almost falling under.

The ground was worthless as I told,

There wasn't any hint of gold,

Just useless shrubs and damp with mold,

We headed on despite the cold.

I found a path all by my own,

'Cause Chowbok lied that there was none

And then it turned out he was gone,

That crook has left me all alone!

Chapter 4 – The Saddle

i sat and thought things carefully
he kept me out from this valley
should i stop now when - by golly -
the mystery unfolds finally?

but to proceed i should be mental
what happens if i sprain an ankle
or in a pit fall for example
who the helping rope will dangle?

so then i made up my mind
when danger comes i'll turn around
try reach the top and look behind
to see what's on the other side.

Chowbok dropped his swag as whole
so everything in blankets roll,
i tied the ends so i could stroll,
and 'round one shoulder carried all.

i reached the top and took a glance
thousands of feet below my stance
on riverbed that's so immense
an angry river gushed intense

but then it happened just by chance
the clouds were shifting like a dance
through an easy pass like an entrance
i caught a glimpse of distant plains

the night's not far, all cold and black
no camping here - that choice i lack
i must go forward or go back
i took a pull off brandy flask

what precipices i'll come across
would my descent see my grip loss
and then the river how to cross
where to and fro the current toss?

discover this and make my name
to gain the fortune and the fame
i felt that life would be a shame
if missing this would be my blame

i had to reach the lower ground
i bruised a lot and took a pound
a waterfall at last i found
alas i could not go around

i leaped down to deep pool below
my heavy swag gave me a blow
i nearly drowned in all that flow
to providence my life i owe!

the blankets kept the matches dry
i was so happy i could cry
some tea and biscuits 'neath the sky
helped to keep my spirits high

i can't go back that chasm fall
so my return's impossible
the only comfort to my soul
my watch reminds me of people

i fell asleep and dreamt a dream
with mountain sized organ it seem
in caverns depths its pillars gleam
when Handel played the keys supreme

when i woke up i couldn't tell
distant music on my ears fell
aeolian harp as clear as bell
exact same noise as Chowbok's yell!

and now the reader i implore
remain on your familiar shore
don't go where none has gone before
it's never easy to explore

Chapter 5 – The river and the range

I walked down to the river side
its icky ground with tons of mud
The stream was rapid rough and wide
I heard small stones as they collide

I couldn't swim, I couldn't ford.
I'll make a raft and go on board.
to leave my swag i can't afford,
unsafe alone so help me lord.

a plant three meters long its stalk
grew everywhere 'round every rock
it's hollow so it floats like cork
at right angles i piled a stock

this plant with iris looking flower
its fiber leaves packed lots of power
just weaving strips took me an hour
to sightly tie the bundles' "tower"

i picked a spot to make my cross
where it was slow and wide across
to grip i must in spite the toss
without my raft i'll be at loss

the water there were much to deep
at last my hold i could not keep
the current took me in its sweep
what's done is done too late to weep

i drifted on the current roar
a kilometer less or more
at last i woke up near the shore
i can't recall what was before

i missed old Chowbok's wretched soul
he'd help me here in this hell hole
to make him Christian was my goal
but there i failed – he always stole

i rose from sleep in early dawn
feeling strange there all alone
but still my hope was far from gone
seeing the dangers i took on

the clouds rolled up into a mist
my keen eye sight came to assist
some goat tracks that can't be dismissed
could shepherds in this land exist?

i raised my eyes ahead again
the horror's shudder hit me then
a circle of gigantic men
ten times myself they're higher than

i must have fainted from the chill
the figures standing silent still
perhaps statues the cloud conceal
i waited long but movement nil

a crude barbaric Stonehenge here
their pose like Chowbok's filled me fear
the mouths were open, two fell near
their heads all empty contents clear

Then came a gust of howling wind
the statues moaning like a fiend
the organ's evil pipes that grinned
to hear this choire - what have i sinned?

since i came home to England's bay
a friend on organ some chords play
brought memories of that strange day
it's Handel's concert by the way

Balls of Steel Awards

"And the simple step of a simple courageous man is not to partake in falsehood, not to support false actions!"

"ONE WORD OF TRUTH SHALL OUTWEIGH THE WHOLE WORLD."

— Aleksandr Solzhenitsyn in his Nobel Lecture

(The Russian novelist who told the West about the Soviet gulags)

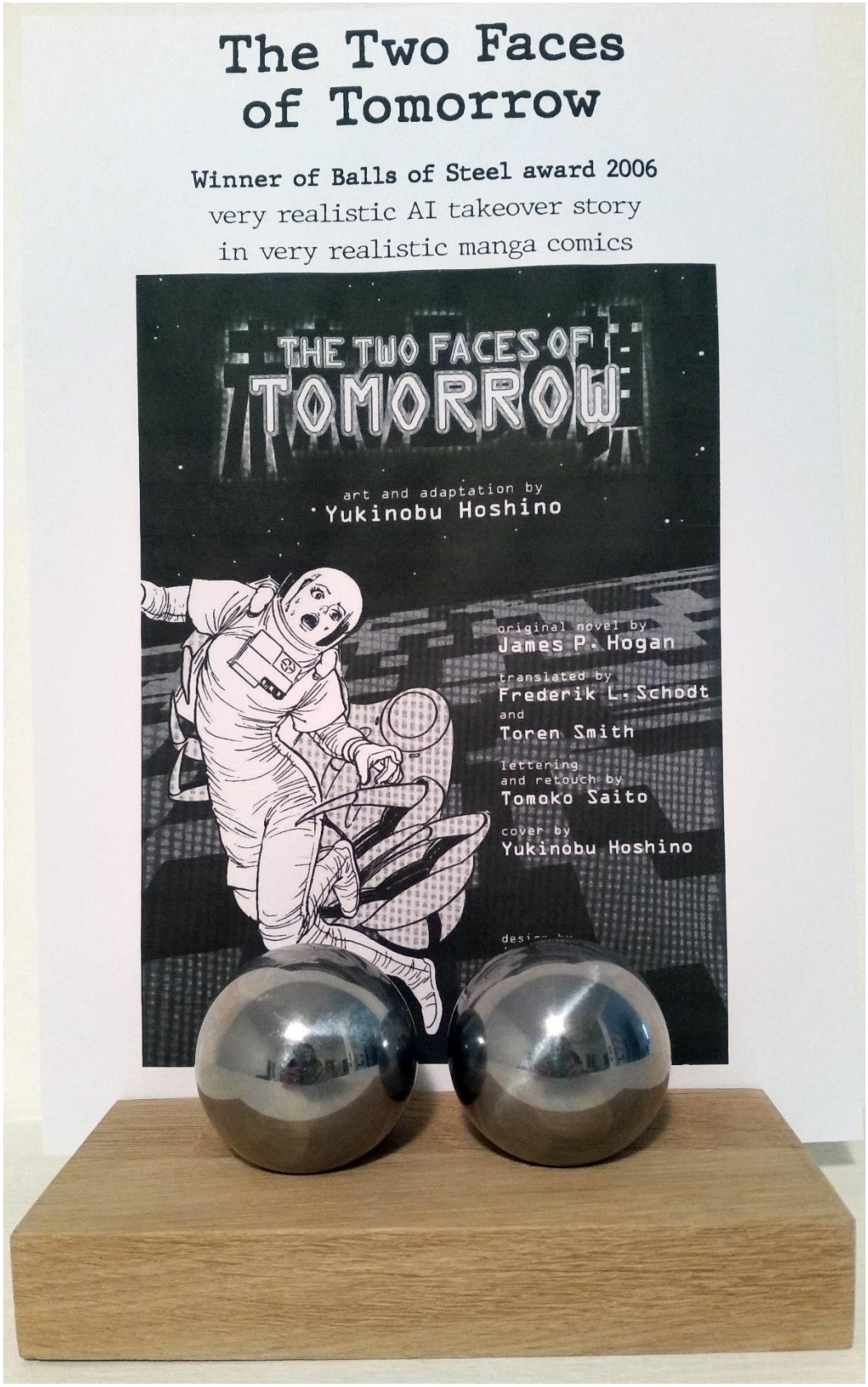
Robotics category:

Balls of Steel Award 2000 - Bill Joy for his article Why the future doesn't need us

Balls of Steel Award 2005 - Hugo de Garis for his book The Artilect War about AI

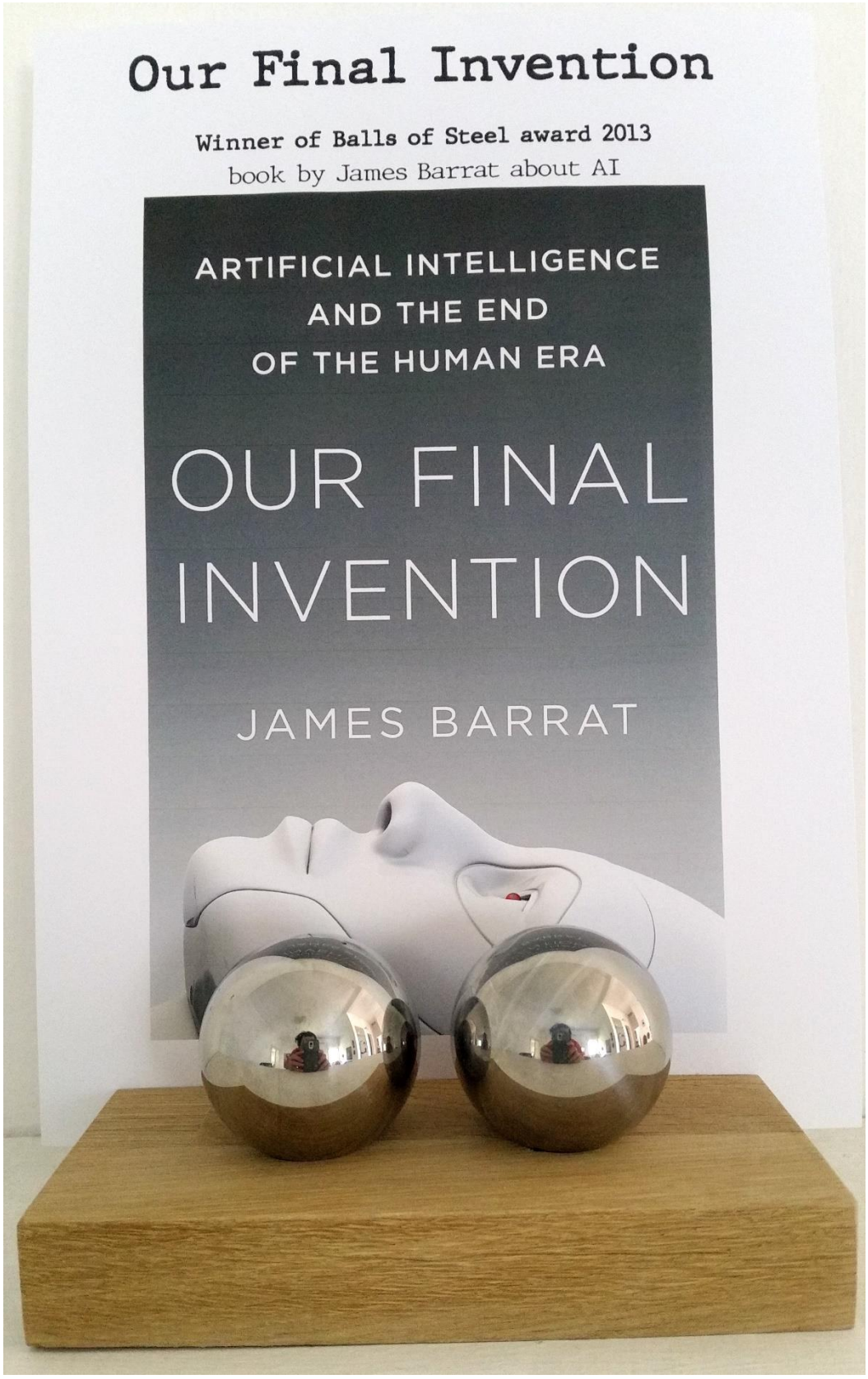
Hugo de Garis on AI: Are We Building Gods or Terminators? thanks to Singularity Weblog
https://www.youtube.com/watch?v=lEaAidCmxus

Balls of Steel Award 2006 - The two faces of tomorrow manga comics about AI takeover



Balls of Steel 2013 - Mary Wareham for Campaign to Stop Killer Robots

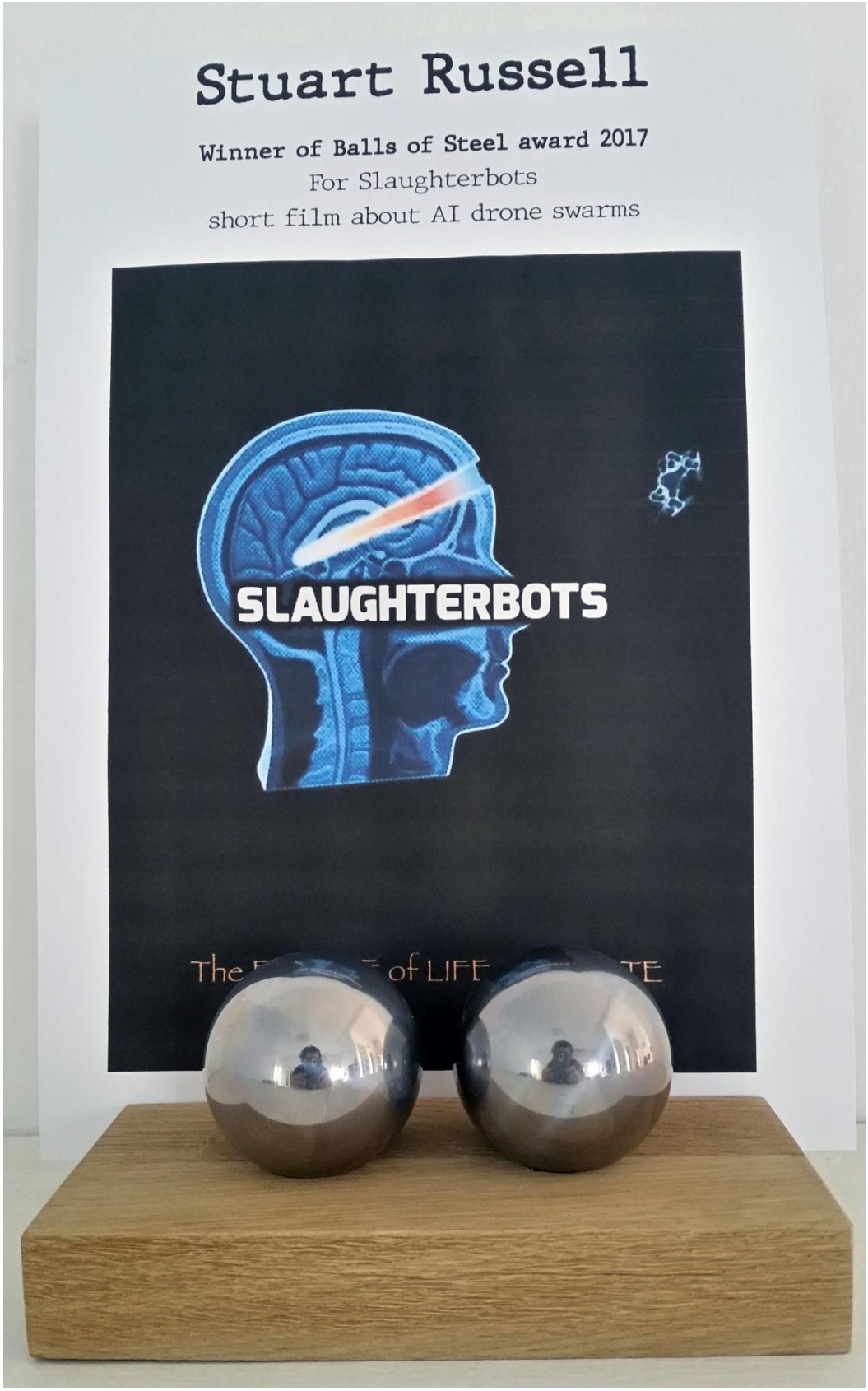
Balls of Steel 2013 Award - Our Final Invention book about AI by James Barrat



Balls of Steel 2014 - Ex Machina film

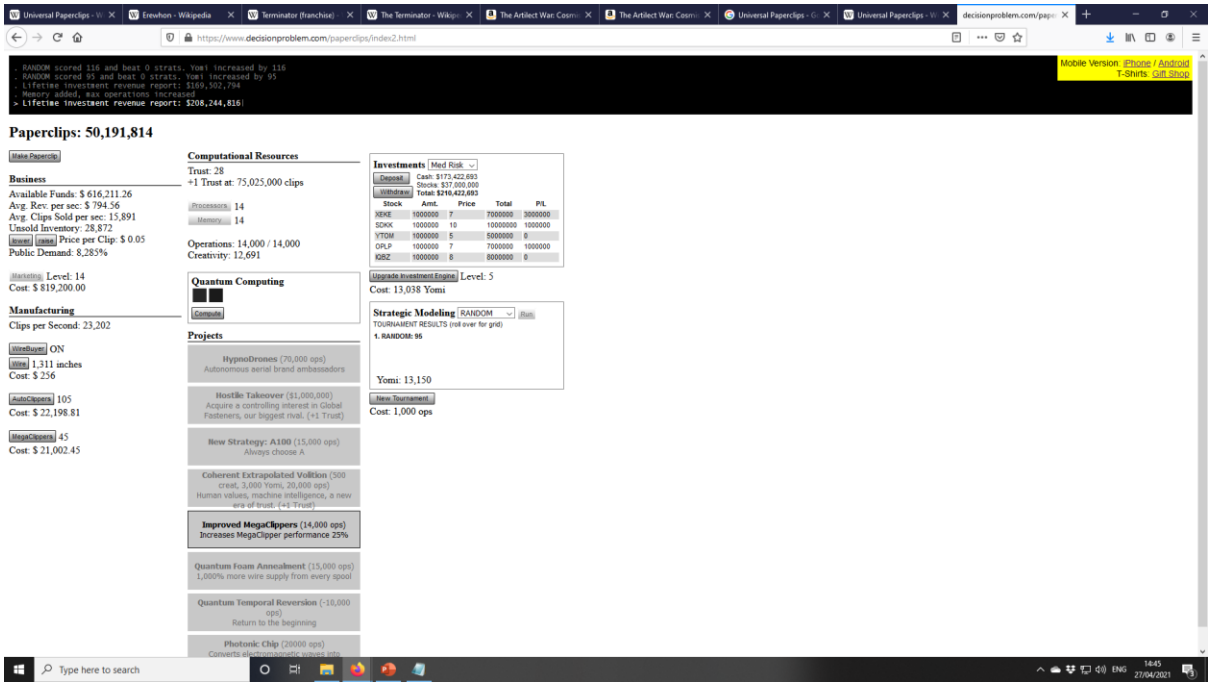
Balls of Steel 2015 - Stephen Hawking for signing the Open Letter on AI

Balls of Steel 2017 - Stuart Russel for the short film SlaughterBots



Balls of Steel 2017 - Universal Paperclips

As proof of just how addictive this game is - I confess that I played it for A FEW HOURS. Consider it's like 25 years since I played any computer game. So this simple game really illustrates to the player the one track mind of a machine: more more more!


Universal Paperclips - W
Erewhon - Wikipedia
Terminator (franchise) -
The Terminator - Wikipe
The Artilect War: Cosmi
The Artilect War: Cosmi
Universal Paperclips - G
Universal Paperclips - W
decisionproblem.com/pape
https://www.decisionproblem.com/paperclips/index2.html
. RANDOM scored 116 and beat 0 strats. Yomi increased by 116
. RANDOM scored 95 and beat 0 strats. Yomi increased by 95
. Lifetime investment revenue report: $169,502,794
. Memory added; max operations increased
> Lifetime investment revenue report: $208,244,816
Mobile Version: iPhone / Android
T-Shirts Gift Shop
Paperclips: 50,191,814
Make Paperclip
Business
Available Funds: $ 616,211.26
Avg. Rev. per sec: $ 794.56
Avg. Clips Sold per sec: 15,891
Unsold Inventory: 28,872
lower raise Price per Clip: $ 0.05
Public Demand: 8,285%
Marketing Level: 14
Cost: $ 819,200.00
Manufacturing
Clips per Second: 23,202
WireBuyer ON
Wire 1,311 inches
Cost: $ 256
AutoClippers 105
Cost: $ 22,198.81
MegaClippers 45
Cost: $ 21,002.45
Computational Resources
Trust: 28
+1 Trust at: 75,025,000 clips
Processors 14
Memory 14
Operations: 14,000 / 14,000
Creativity: 12,691
Quantum Computing
Compute
Projects
HypnoDrones (70,000 ops)
Autonomous aerial brand ambassadors
Hostile Takeover ($1,000,000)
Acquire a controlling interest in Global Fasteners, our biggest rival. (+1 Trust)
New Strategy: A100 (15,000 ops)
Always choose A
Coherent Extrapolated Volition (500 creat, 3,000 Yomi, 20,000 ops)
Human values, machine intelligence, a new era of trust. (+1 Trust)
Improved MegaClippers (14,000 ops)
Increases MegaClipper performance 25%
Quantum Foam Annealment (15,000 ops)
1,000% more wire supply from every spool
Quantum Temporal Reversion (-10,000 ops)
Return to the beginning
Photonic Chip (20000 ops)
Converts electromagnetic waves into
Investments Med Risk
Deposit Cash: $173,422,693
Withdraw Stocks: $37,000,000
Total: $210,422,693
Stock Amt. Price Total P/L
XEKE 1000000 7 7000000 3000000
SDKK 1000000 10 10000000 1000000
YTDM 1000000 5 5000000 0
OPLP 1000000 7 7000000 1000000
KBEZ 1000000 8 8000000 0
Upgrade Investment Engine Level: 5
Cost: 13,038 Yomi
Strategic Modeling RANDOM Run
TOURNAMENT RESULTS (roll over for grid)
1. RANDOM: 95
Yomi: 13,150
New Tournament
Cost: 1,000 ops
Type here to search
ENG
14:45
27/04/2021

Balls of Steel 2017 - Rob Miles for video explanations of the paper Concrete Problems in AI Safety

Balls of Steel 2018 - Do You Trust This Computer?

Balls of Steel 2018 - The Truth About Killer Robots

Balls of Steel 2020 - Elon Musk for comparing Google's DeepMind to the film WarGames

Elon Musk, Blasting Off in Domestic Bliss By Maureen Dowd Published July 25, 2020

https://www.nytimes.com/2020/07/25/style/elon-musk-maureen-dowd.html

He said his “top concern” is DeepMind, the secretive London A.I. lab run by Demis Hassabis and owned by Google. “Just the nature of the A.I. that they’re building is one that crushes all humans at all games,” he said. “I mean, it’s basically the plotline in ‘War Games.’”

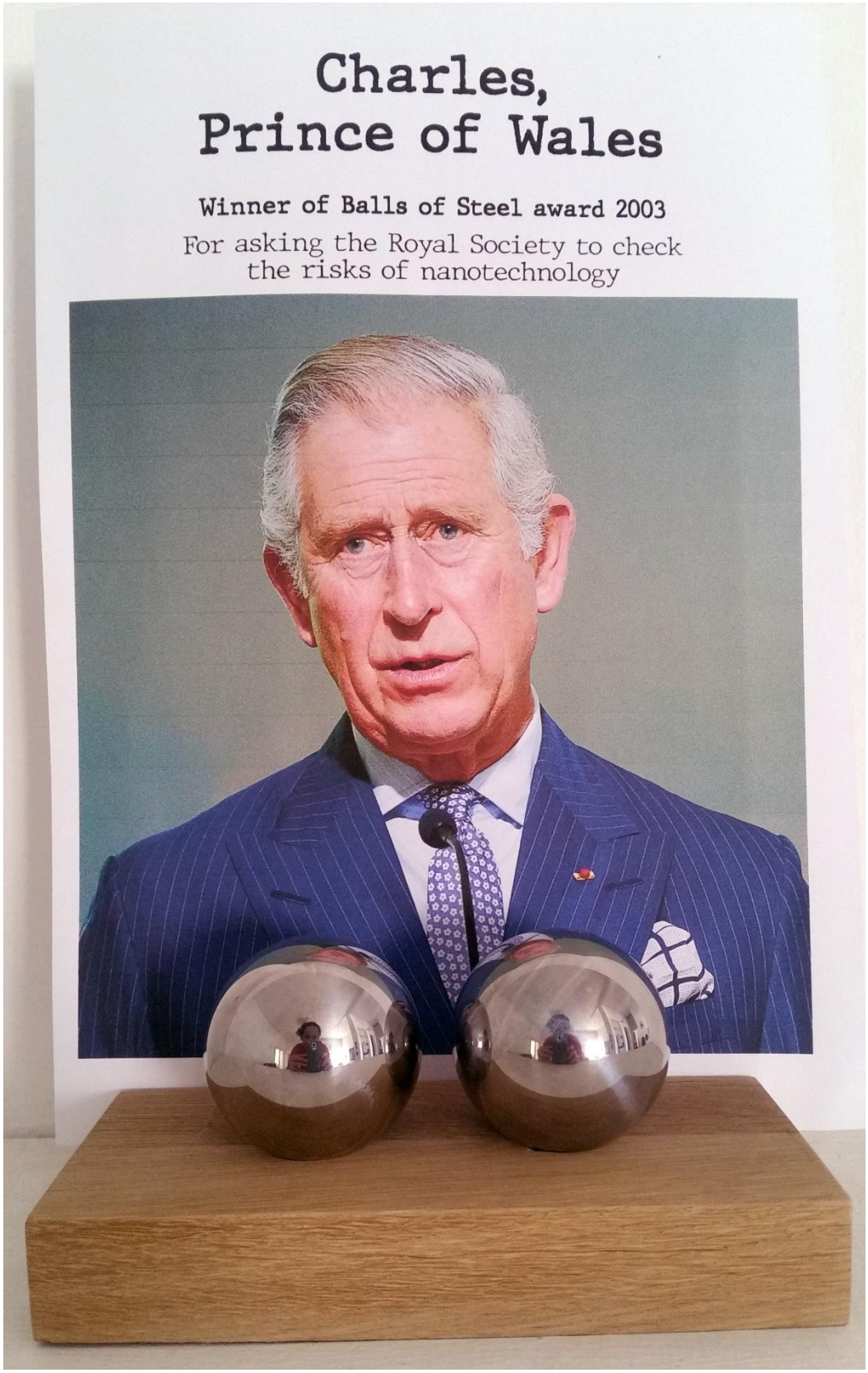
Elon Musk

Winner of Balls of Steel award 2020

For warning against Google's DeepMind:
it's basically the plotline in 'War Games.'

Nano Technology category

Balls of Steel Award 2003 - Prince Charles for asking the Royal Society to check the dangers of nano-technology



Balls of Steel 2011 - Futurama for the episode Benderama

I just watched one of the best episodes of Futurama about nano "gray goo"!
https://futurama.fandom.com/wiki/Benderama
https://en.wikipedia.org/wiki/Benderama
https://en.wikipedia.org/wiki/Gray_goo

BTW the equation is somewhat wrong (thanks gnovice!)
https://scifi.stackexchange.com/questions/4291/what-was-the-equation-shown-in-benderama

but still very interesting, it's an example of
https://en.wikipedia.org/wiki/Harmonic_series_(mathematics)
which is divergent, which means grows to infinity (although very slowly)
see:
https://en.wikipedia.org/wiki/Ant_on_a_rubber_rope
and:
Ant On A Rubber Rope Paradox by Vsauce2
https://www.youtube.com/watch?v=OM9KepKsg6U

IRL (In Real Life) each gray goo machine keeps producing machines, not just multiplying once, plus they are the same 100% size.
i liked very much the twist that Aaron Ehasz the writer of this episode made the nano replicators independent of special raw materials because they make their own from whatever they find (in the episode they make ethanol from water and CO2).

Futurama

Winner of Balls of Steel award 2011

For the episode Benderama

about grey goo

Balls of Steel 2013 – Nanobots

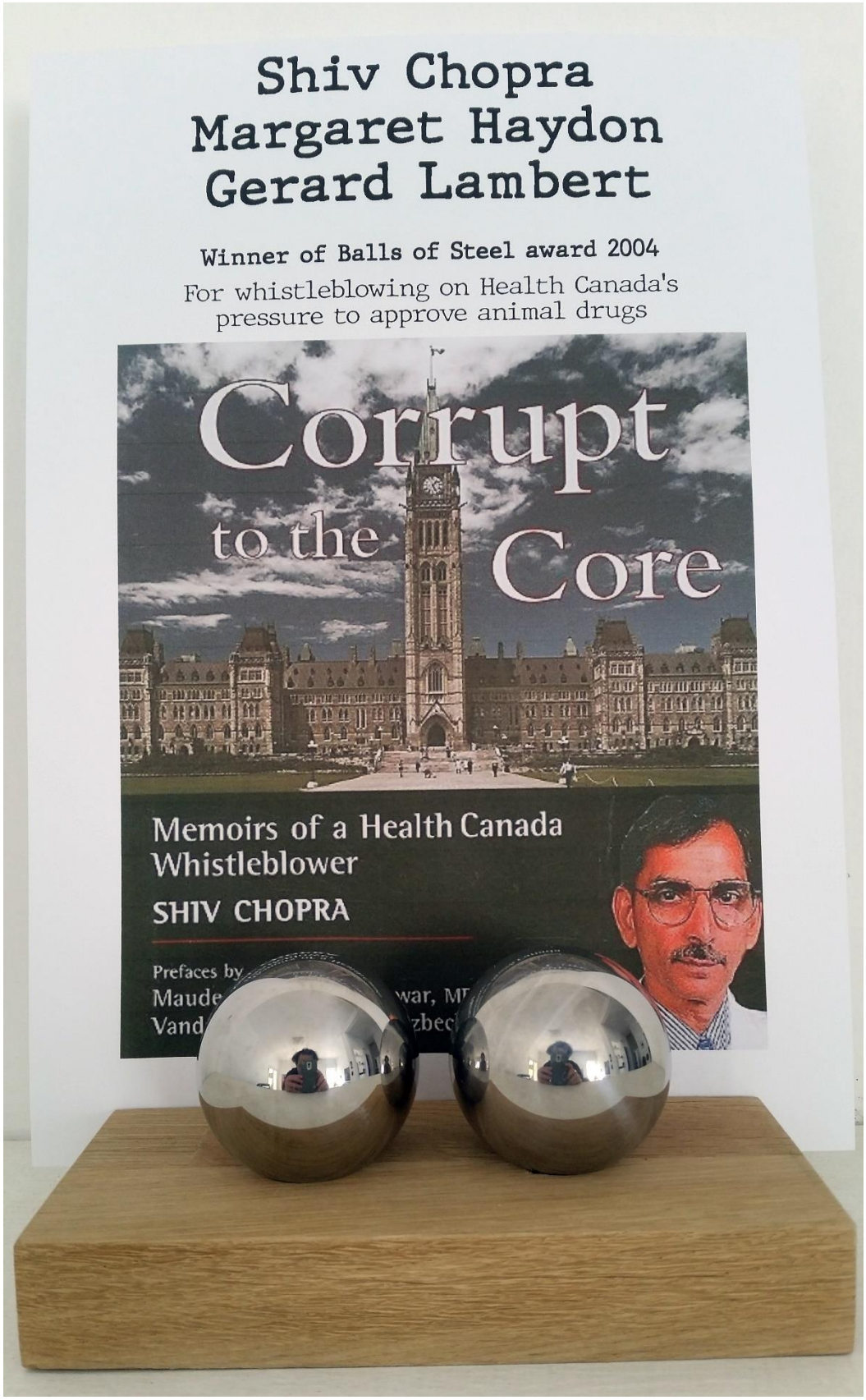
You really should watch this video clip: Nanobots - They Might Be Giants (Official Video) thanks to Youtube channel of ParticleMen https://www.youtube.com/watch?v=CSPv8tXISsU

Genetic Engineering category

Balls of Steel Award 1998 - Árpád Pusztai

Balls of Steel Award 2002 - Vandana Shiva

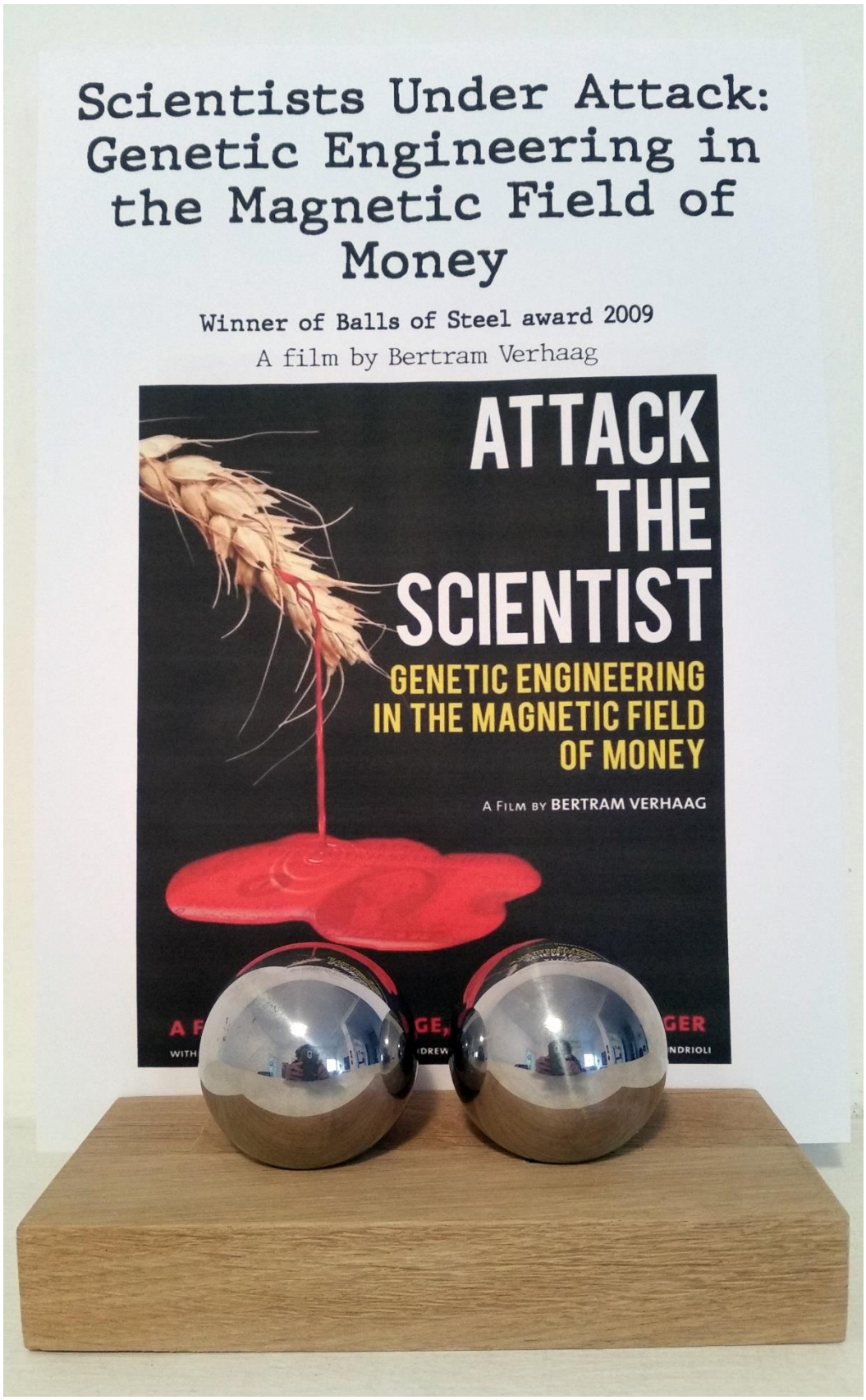
Balls of Steel Award 2004 - Shiv Chopra, Margaret Haydon and Gerard Lambert



Balls of Steel 2007 - Megan Westgate

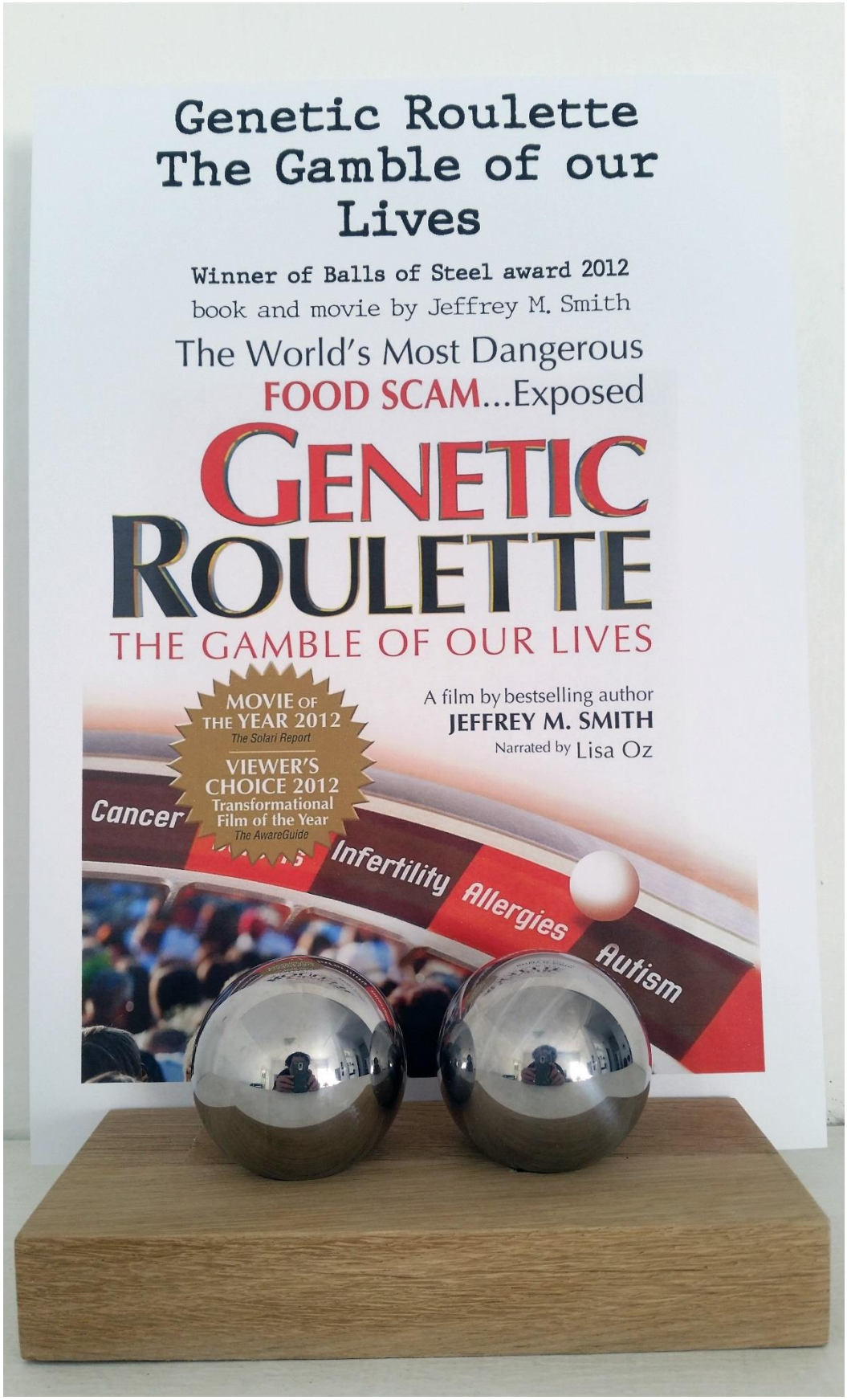
Balls of Steel 2008 - The World According to Monsanto

Balls of Steel 2009 - Scientists Under Attack: Genetic Engineering in the Magnetic Field of Money



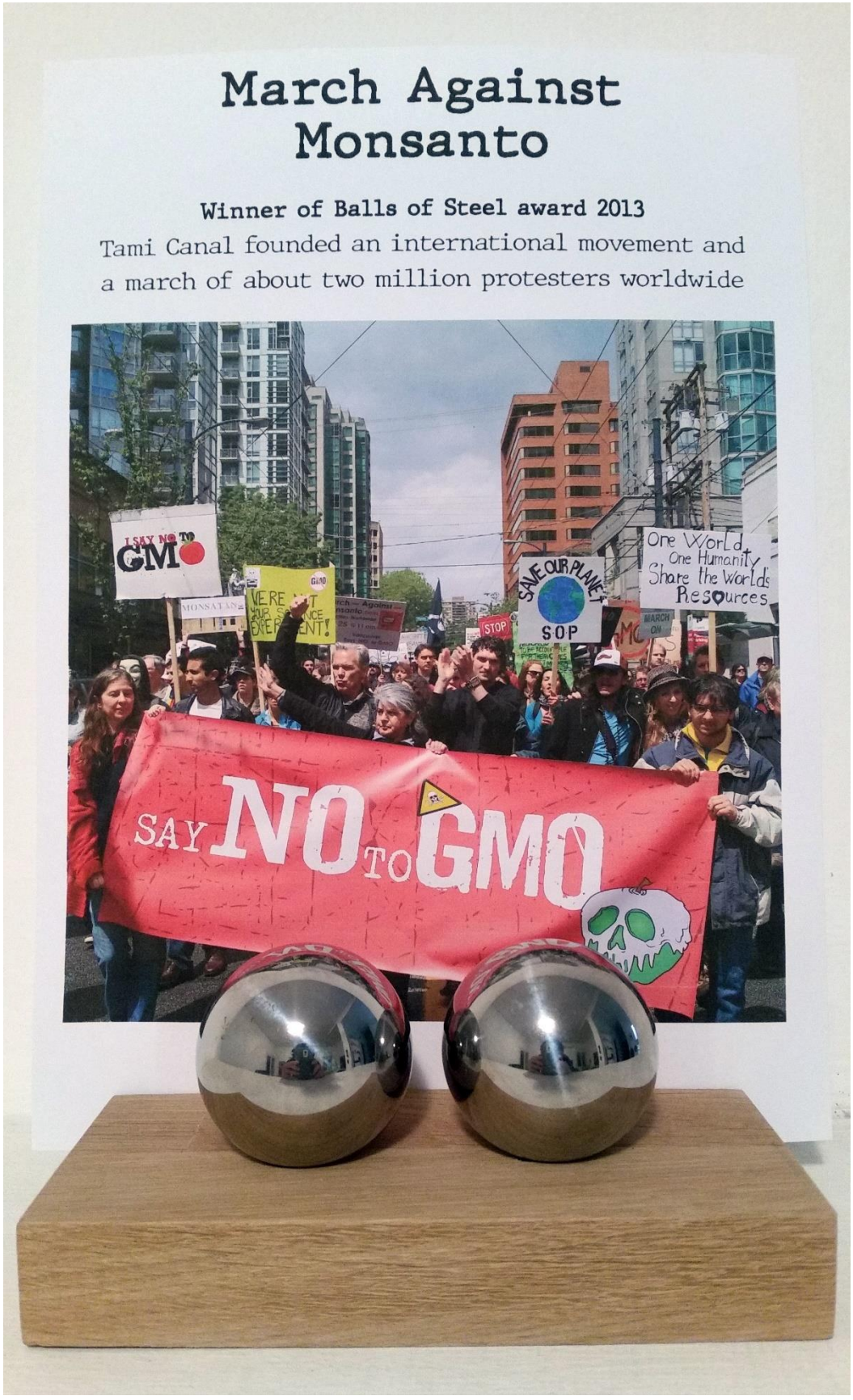
Balls of Steel 2009 - Emmanuelle Schick Garcia

Balls of Steel 2012 - Genetic Roulette The Gamble of Our Lives



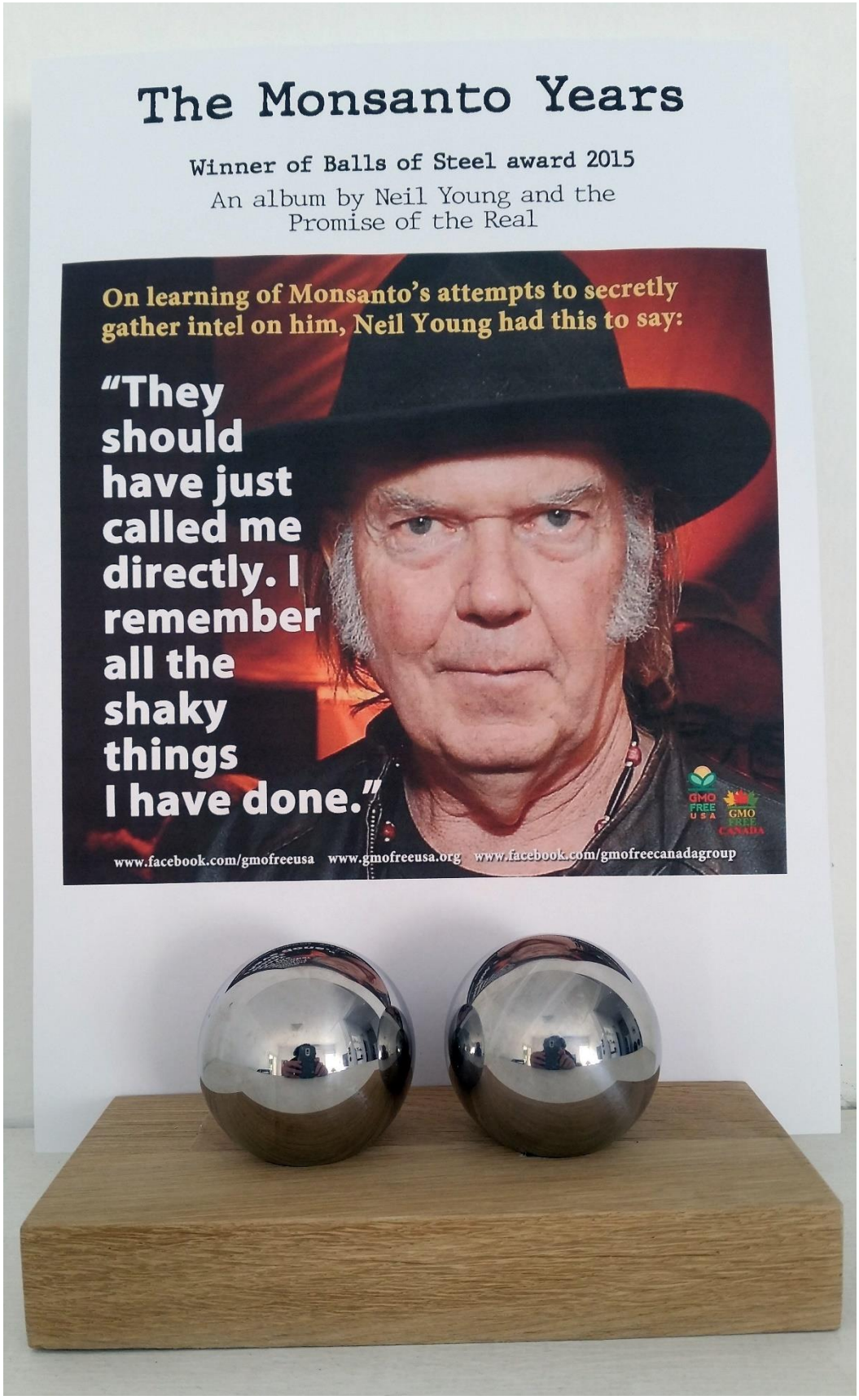
Balls of Steel 2012 - All of Us Guinea Pigs Now?

Balls of Steel Award 2013 - March Against Monsanto



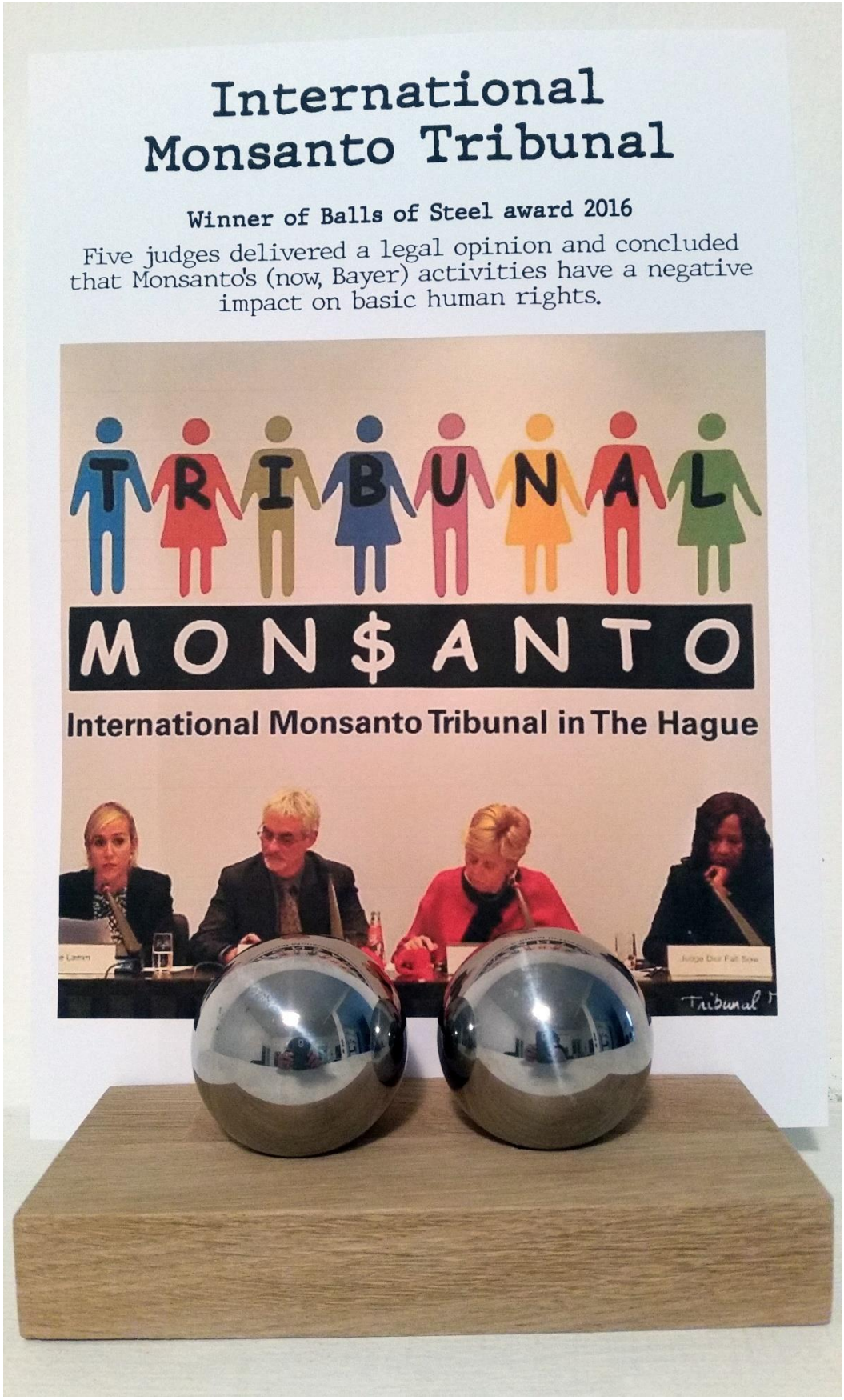
Balls of Steel Award 2013 - Futurama For Leela and the Genestalk about “MOMSANTO”

Balls of Steel 2015 - The Monsanto Years

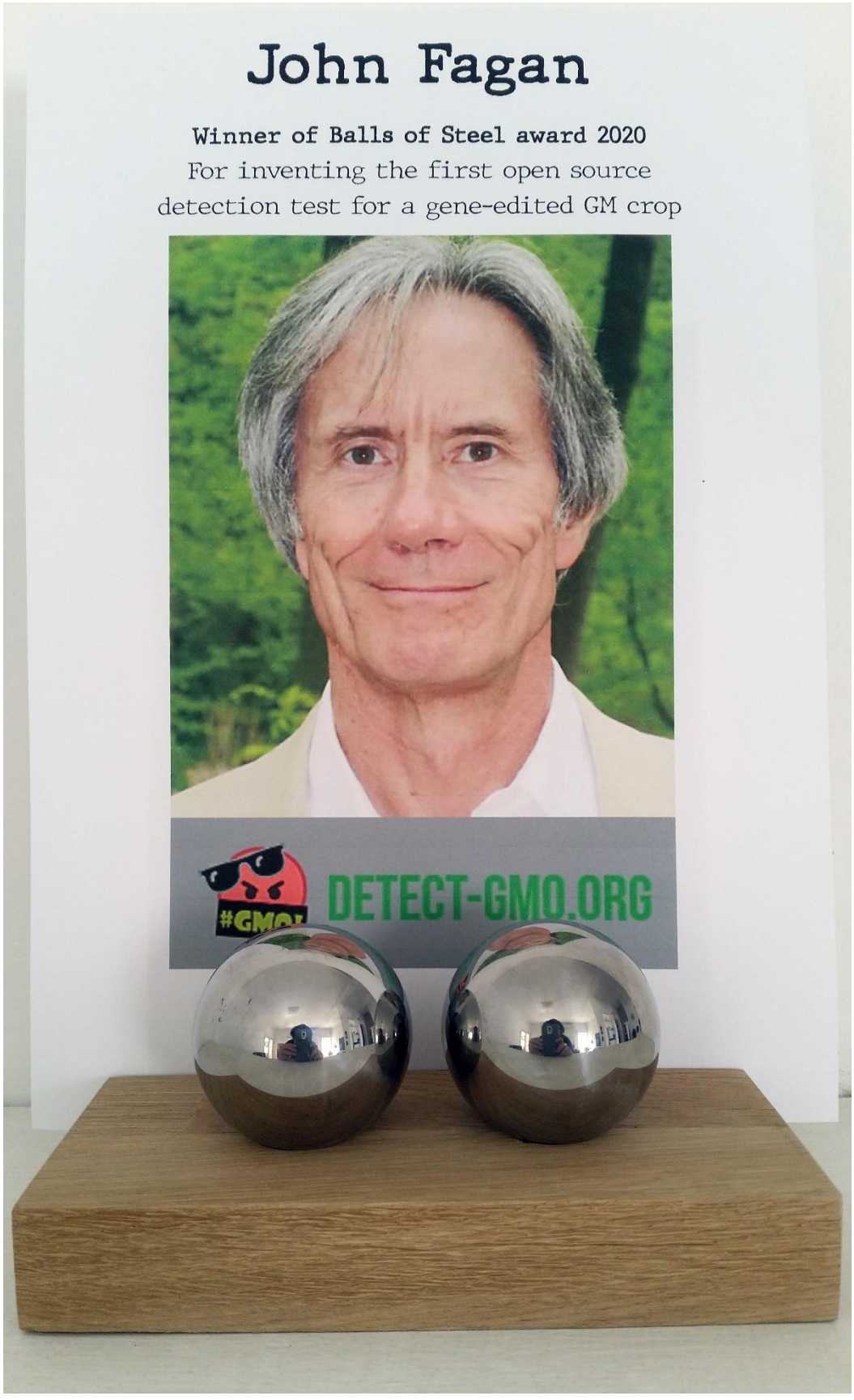


Balls of Steel Award 2016 - Greenpeace

Balls of Steel Award 2016 - International Monsanto Tribunal

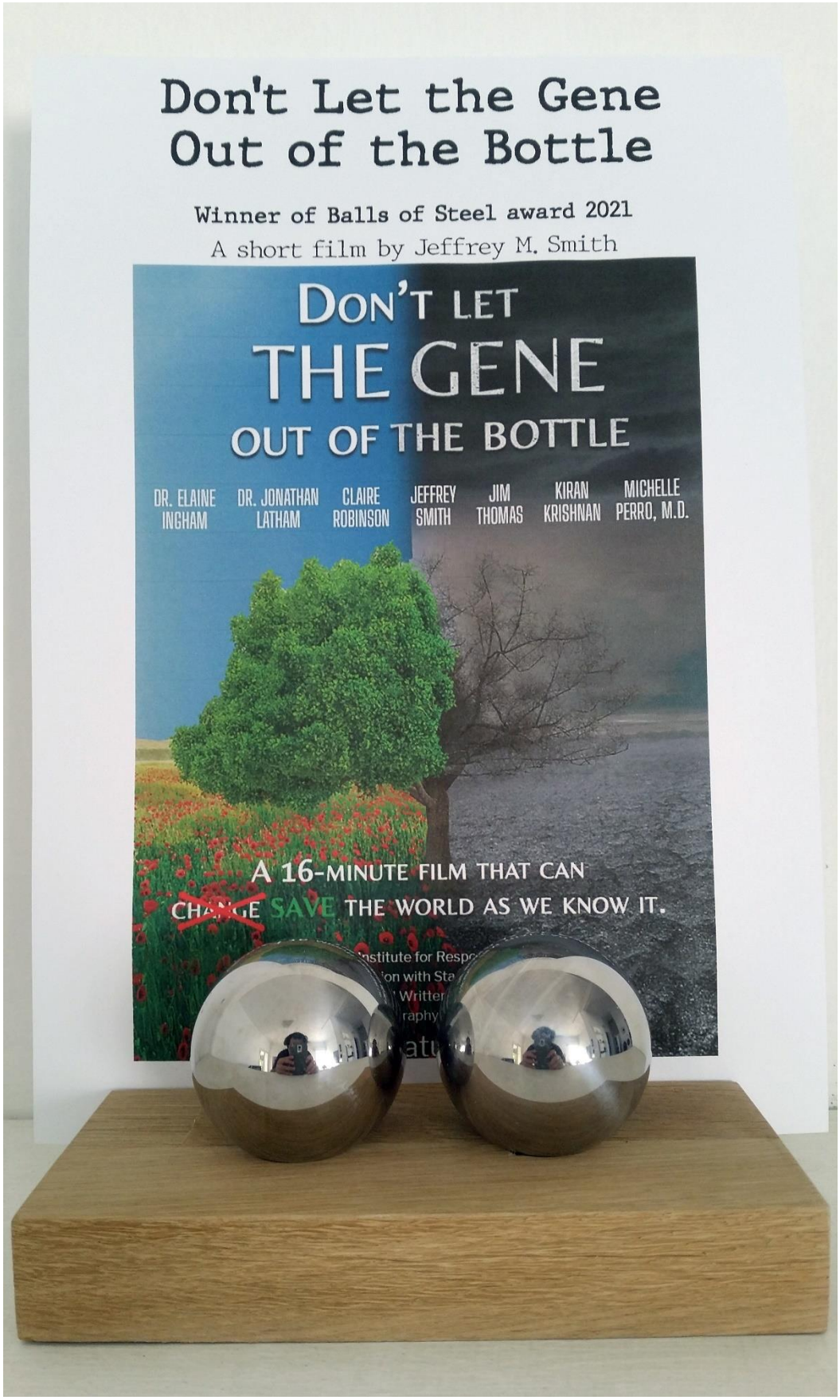


Balls of Steel Award 2020 - John Fagan



Balls of Steel Award 2020 - Percy

Balls of Steel 2021 - Don't Let the Gene Out of the Bottle



FAQ: Why didn't organization X get an award?

All the other organizations (Future of Life Institute (FLI), Machine Intelligence Research Institute (MIRI), the Future of Humanity Institute (FHI) and so on) are WRONG!
They basically say that we SHOULD do AI, but do it RIGHT. But you cannot control a super intelligence, this is explained thoroughly in my projects.
Amazingly, "neo-luddism" is the ONLY organization that says this simple conclusion in no uncertain terms: STOP BUILDING ANY KIND OF AI !!!

The Brains Brothers musical parody [unfinished]

i need to translate it from Hebrew to English but i do not have time.

The Blues Brothers 1980

... it appears to us that we are ourselves creating our own successors ...

... the time will come when the machines will hold the real supremacy over the world and its inhabitants ...

Samuel Butler 1863

Locations on the moon:
The first-discovered pit is located (Fig. 1) in the Marius Hills region of Oceanus Procellarum (14.11N, 303.21E)

The two other pits were found within Mare Tranquillitatis (8.31N, 33.21E) and Mare Ingenii (36.01S , 166.11E)
Collect this helium 3 on the far side of the moon .The residence on the moon is in the polar region where there is ice in the shade.

Locations on Mars:

The first part of the musical is based on the movie The Blues Brothers) the original movie(.
The best are Elon Musk and Bill Joy (Bill Joy has been under a 20-year boycott boycott).
The bad guys chasing it is the big companies that are developing quantum computing.
Police - Google (the cops are Page and Brin) is the probation officer for this Bill Joy John M. Martinis
The Woman of Mystery - IBM
Neo-Nazis - Amazon
Country Band - Microsoft
The second part of the musical is based on the movie The Blues Brothers 2000 (sequel).
The best is Elon Musk, the "fat" Steve Wozniak,
And Adam Mason (who organized the first anti-robot demonstration in 2015) as the kid.
The one who joins them and " repents" is "Police Chief" Hugo de Garris.
The bad guys chasing it is the universities of neuroscience and artificial intelligence.
Stanford, MTA, Berkeley, Harvard, Cambridge, Oxford.
Chief of Police - University of Brussels Hugo de Garris
Russian Mafia - Cambridge Carl Firston Karl J. Friston
The Genius Neuroscientist Who Might Hold the Key to True AI
White Racists - MIT Kurzweil
Queen Most - The Voodoo Queen This is Chalis Glendining (famous neo-ludite).
Chellis Glendinning
At the end of the day the bad guys come with all kinds of electrical gadgets and chalice and electromagnetic pulses and all the electrical appliances burn out..

Opening scene

Venus planet

sees industrial structures of what is sent from Venus to Mars

filters CO2 That it does not contain sulfur dioxide (which when it comes in contact with oxygen and water becomes sulfuric acid).
Then turn the e CO2 Clean the ice and send to Mars with the help of the catapults.

Industrial buildings on the planet Venus

Our heroes are Elon Musk and Bill Joy.

They are called the Brains brothers

brains brothers

Put Bill Joy in "Exile" on the planet Venus.

Elon Musk's spaceship is parked at the entrance to the house where Bill Joy lives.

The Air Lock opens and they both walk towards each other .Both with black glasses and a black hat.
XXXXXXXXXXXXXXXXXXXXX
A poem- she caught the Katy

he caught on a KT
extinction event in time

he caught on a KT
extinction event in time

Now my bro 'warned a KT
style extinction will come

This train will run us over
better stay behind

Crazy' bout him
That hard headed brother of mine

safety

He turned to cyborg,
And left me my legs to ride

She caught the Katy

And left me a mule to ride
She caught the Katy
And left me a mule to ride
Now my baby caught the Katy
Left me a mule to ride
The train pulled out
I swung on behind
Crazy 'bout her
That hard headed woman of mine
Man, my baby's long
Great gosh almighty my baby's tall
You know my baby's long
Great gosh almighty my baby's tall
Yeah my baby she's long
My baby she's tall
She's sleepin 'with her head in the kitchen
And her feet' out in the hall
Crazy 'bout her
That hard headed woman of mine
Well I love my baby
She's so fine
But I wish she'd come and see me some time
She do not believe in our love, ah
Look whatta hole I'm in
She does not believe what I'm sayin '
Kid look w hatta shape I'm in
Huh-huh
She caught the Katy
And left me a mule to ride
She caught the Katy
And left me a mule to ride
Well my baby caught the Katy
Left me a mule to ride
The train pulled out
I swung on behind
Crazy 'bout that hard headed woman
Hard headed woman of mine
Huh-huh, huh-huh
XXXXXXXXXXXXXXXXXXX
See the name of the movie: The Brains Brothers.
Elon Musk and Bill Joy hug and the song begins to sing.
They enter the Musk spacecraft.

All the time they are carrying in Elon Musk's private spaceship which is in the shape of the spaceship I invented (six "canes" revolve like a mini gun which looks from a distance like"cigar").

Musk calls the leading Brains spaceship

Bill Joy brought with him the disk-on-key of ??? And trying to put the song ??? On a

Bluetooth speaker . Hear but with distortion .Bill Joy tries his backup disk-on-key but you hear the same thing with him .Bill Joy says nothing but throws the speaker through a small airlock.
Then when Musk shows Bill Joy the performance of the Bryans-carrier, Bill Joy is convinced that it is the new Bryans-carrier and tells Musk to fix the speaker.
After 3.5 months they reach the satellite of Earth and the Moon.
They are now traveling in a cybertrack (Elon Musk's armored truck) that was housed in one of the branches of the leading Bryans.
Bill Joy asks what we are doing here, and Ayalon Musk reminds him that they are looking forward to criticizing the nun, and it is forbidden to lie to the nun.

This nun is Judy Williams and she explains to them about the Order of Butlerism.
Jody Williams

She explains to them that world leaders are trying to shut down their orphanage, where she taught Bill Joy and Elon Musk that machines are dangerous to humanity,
She reminds them that they read in class the story of Samuel Butler about the takeover of the machines - Erwan.

That if they do not convince most people in any of the powers, then autonomous weapons will kill humanity.
They understand that they must mobilize world public opinion, so that it is not identified with this or that country they have to do a concert out of this world - The first appearance on the planet Mars .It is a project that will unite all of humanity against the common enemy the thinking machines.

They say they are not musicians ;So she gives them a recording left to them by Stephen Hawking, their spiritual father:
He begins to explain about an artificial intelligence that it is like an alien culture that comes to visit,
But says they already know all this and now he explains to them more about the task the nun has given them.

The art form of the 21st century is neither music nor video but a combination of both .This art form is called Demo and it evolved in the last decade of the 20th century in what is called the Demo scene.
They are the best programmers in the world, so their way of opening the hearts of the public who have already seen it all and heard it all is through a work of art that will excite them and shake their world .This work of art is the amazing 3D demo calculated in real time with the most amazing graphics and music in the world.
As you grow up you realize that the most complex and best music there is is the classical music of the pre-20th century and the music of jazz and blues in the 20th century .Even after Robert Mogg invented the first popular synthesizer, electronic music never managed to excite people like the good old music.
You are the best programmers in the world and your tool to talk to people is through creating the best demo in the world .So you have to take the good old artificial intelligence, and put it into the hearts of the people through a classic story - inspired by the scriptures, classic effects - the beauty of math, and the new" classical" music - the blues and jazz.
He gives them an example of the blood of a mandola that used jazz (and was named after an album by Miles Davis .(Stephen Hawking explains that this is the way to gain

consciousness(hearts and minds) Of the people.
Live Evil by Mandula

She tells them that their spiritual father Stephen Hawking had another son he did not tell anyone about and that is Hugo de Garris.

She sees that the brothers have lost their way and tells them to go to church.

The church has the preacher James Barrett who gives a sermon on Faust .He explains about St. Typos and so on'.
James Barrat
The brothers come to enlightenment when the spirit of "AJ Good" (who invented the concept of an explosion of intelligence)
IJ Good
Shines from the sky on Bill Joy and he says the e should be returned again BAN And Musk also says that the e should be returned againBAN.

****
Good Old-Fashioned AI

Let us all (All go back)
To the Old (Old AI)
Let us all to the Old (Good Old-Fashioned AI)

Let us not (not create)
A cyber God (Cyber God)
Let us not build a Lord (neural nets must be abhorred)

Turnin ', burnin' forget machine learnin '
It leads to evils unforetold
******* **********

From that moment on the brethren constantly say that they are on a mission in the mission of God.

The brothers understand that they need to convince the leaders of all religions to fight artificial intelligence and only then will they be able to reach enough people in time.

They gather the members of theBAN: Stephen Hawking, Elon Musk, Steve Wozniak, Noam Chomsky, Skype co-founder Jaan Tallinn and Google DeepMind co-founder Demis Hassabis, Signatories include physicist Stephen Hawking, business magnate Elon Musk, the co-founders of DeepMind, Vicarious, Google's director of research Peter Norvig, [1] Professor Stuart J. Russell of the University of California Berkeley, [9] and other AI experts, robot makers, programmers, and ethicists. [10] The original signatory count was over 150 people, [11] including academics from Cambridge, Oxford, Stanford, Harvard, and MIT. [12]

After they've been to church they fly to Bryans-carrier
Bill Joy says they'll pick up the members: BAN
Ayalon Musk explains that it is not so easy because they have all found jobs in the meantime, And Ayalon Musk does not have their contact details.
Bill Joy is angry at Ayalon Musk who promised Bill Joy before the boycott of Bill Joy began that he would keep in touch with them.
Ayalon says it's not a lie, it's just bullshit, what was he supposed to do ? Let Bill Joy go into boycott when he is hopeless?
Then they interfere with the action of
Space Junk Decelerator
Then the US space force begins to chase after them.
They catch them and see that Ayalon Musk has in his history an offense of interfering with the action of:
Space Escalator
So now they want to stop him .But Bill Joy and Ayalon Musk manage to dodge the power of space.
They do this by charging a non-nuclear electromagnetic pulse.
Bill Joy says it will also destroy their spaceship.
But Ayalon Musk explains that it can not hurt them, they are on a mission in the mission of God!
He also explains that it does not affect their spacecraft because it is made of metal so it functions like a Freddie cage, and everything in it is protected from the electromagnetic pulse..
XXXXXXXXXXXXXXXXXXXXX
A poem- I can not turn you loose
instrumental (no lyrics)
XXXXXXXXXXXXXXXXXXXX
After the U.S. Army spacecraft is paralyzed, they leave policemen oxygen packs with water and batteries so they do not die there, and transmitters that can send a distress signal to pick up the officers from the broken spacecraft.
The commander of the space force in the broken spaceship says - I'll catch this bastard, even if it's the last thing I do..
Meanwhile Elon Musk and Bill Joy escape.
XXXXXXXXXXXXXXXXXXXXX
A poem- Peter Gunn Theme
instrumental (no lyrics)
XXXXXXXXXXXXXXXXXXXX
They are on the moon again and camp the Bryans-carrier inside the silo where she is protected.
They then drive in a cybertrack (Elon Musk's armored truck) to what looks like a mining town in the Wild West but on the moon .There is an inn there and they come in and everyone knows Elon Musk.
Outside, the woman who chases after them is parked throughout the film.
This woman is the boss of IBM.
Later it becomes clear to us that she is angry with Elon Musk because he warns against the artificial intelligence.
So for the first time she tries to kill him with the help of a plasma rifle that shoots plasma

https://en.wikipedia.org/wiki/Plasma_railgun
But Bill Joy just bends over to listen to the noise of helium catapults 3, Which passes through the lunar soil (there is no atmosphere so it does not pass through the air).
Bill Joy tells Ayalon Musk to come downstairs you must hear it.
Then the plasma misses them, the hot plasma hits the front door and burns a hole inside.
The woman from IBM sees that she was unable to eliminate Elon Musk and drives away in her "lunar rover".
One of the people playing cards in the lobby of the entrance to the inn asks Ayalon Musk: Did you bring me the March snack ?Ayalon takes the snack out of his pocket and throws it at him.
a Mars bar
Because the hotel is dug underground here one hears constantly the noise of the " night train "the nickname for a catapult that launches helium-3 full tanks to Earth (for nuclear fusion) and an anti-catapult next to it that receives tanks with oxygen water and food from Earth .Bill Joy asks how often you hear the noise of"The Night Train "and Ayalon Musk say that so often you will not notice it.

Bill Joy says tomorrow we need to start re-establishing the BAN.
Ayalon Musk says that tomorrow he will announce at work that he is resigning.
Bill Joy asks him how he will get to work, the cops took the license plate of his spaceship, and they know where he lives, etc.'.
So Ayalon Musk explains that he forged his address when he made a license,
The inscriptions on the moon are by GPS Moony, so he gave them the address GPS Moonlight of the 3D squash stadium, which can be damaged in walls and floor but also in the ceiling .It is a popular sport on the moon, a sport that is suitable for gravity on the moon that is 6 times lower than on Earth .The contestants are enclosed in a transparent plastic cube that hangs in the middle of the stadium and there are seats from all directions both above and below it for the spectators, and this too is broadcast to the spectators at home in three dimensions for the entire solar system.

Ayalon Musk gives Bill Joy some fortified type wine Night Train. Bill Joy grabs Musk from the bed and falls asleep .Ayalon Musk covers it and sleeps on the chair.
The next day the cops come to arrest them.
The woman from IBM is operating a powerful explosive device on a remote control.
But the cheap walls of the inn are made of lunar concrete with sulfur, so we built them very thick as a bunker
It provides less protection from cosmic radiation, so walls would need to be thicker than concrete walls (the water in concrete is an especially good absorber of cosmic radiation).
https://en.wikipedia.org/wiki/Lunarcrete
The guard informs Musk that he did not pay the oxygen and heating bill so they cut off the electricity and heating to his apartment so they have to sleep with the suits.
So the explosion mostly destroys the lobby of the entrance but we see Ayalon Musk and Bill Joy come out dressed in a space suit, shaking the dust off them,
Elon Musk looks at his watch and says: It's almost nine o'clock in the morning, I have to go to work.
And they board their lunar roaming vehicle.
The policemen are also not harmed and after a while they also come out to shake off the dust and continue the chase.
So now they need to collect and convince them one by one.

Elon Musk arrives at the helium production plant 3.
He talks to the factory manager there and says he needs to retire from work .The manager asks him why ?And Ayalon Musk says he's going to be a priest .The foreman says okay .Elon Musk tells him that God will bless him and the manager thanks him and they say goodbye.

The brothers in Musk's car.
Elon Musk pulls out a Joint (marijuana cigarette) wrapping paper with Stuart Russell's inscription on it.
Bill Joy asks: What is it?
Elon Musk says: This is the last known address of Demis Hasabis, Shane Leg, and Mustafa Suleiman.
Demis Hassabis
Shane Legg
Mustafa Suleyman
Bill Joy reads, folds and puts in the suit pocket, nods his head and says: Hidden are the ways of God.
Elon Musk nods and says: Yes.
They arrive at the house where they lived, Mrs. Trentino tells them they no longer live there . They ask how their habits were, she replies that they were good kids but would make a lot of noise at night .At the end she runs after them and gives them a written business card
Demis and the game programming gurus With telephone.
Hear the music of
XXXXXXXXXXXXXXXXXXXXX
A poem- Peter Gun Theme
instrumental (no lyrics)
XXXXXXXXXXXXXXXXXXXX
Elon Musk says thank you to Mrs. and they go there.
They come to a small virtual game computer game development company where they work with discarded pizza trays and empty cola jolts cans in every corner on virtual reality versions of the classic games Syndicate and Theme Park) made by Hasabis in his youth).
Hasabis asks Bill Joy: So Bill, you're free and you're rehabilitated .What are your plans ? How about a uniform programming language you promised us for all the computers from Mader Packer?
Elon Musk intervenes and reminds them that the reason the Joy Trail was banned is that after he did the operating system BSD On which most of the Linux systems in the world today are based, and most of the Internet they use works on the e-tier TCP / IP That he programmed a name for them .So enough with petty questions of "little money".
The brothers say they want to re-establish the BAN.
Bill Joy leans forward and asks: Now who here at the table can tell me that he felt better about himself and what he is doing for humanity, than when you signed the open letter on artificial intelligence?
You were the backbone of a great collection of artificial intelligence experts defending the future of human beings.
You can make it live to breathe and jump again.
Hsabis and gurus of the game in?
Look at these Betty shirts with the jeans.
And I thought I had a hard time on the planet Venus.
Hasabis says to Bill Joy: At least we changed clothes, you with the same suit you wore 20 years ago!
Forget it, in life we will not reach this strong understanding not without more theoretical

knowledge. We'll never get Peter No Revig.
Peter Norvig
Bill Joy asks: Where is he?
And Shane Leg says: Forget it, Peter Norway is the head of NASA's computer science division.!
And Mustafa Suleiman says: Yes and Stuart Russell got married!
Stuart J. Russell
Elon Musk says: Where's Stuart - Robots-Killers - Russell?
Shane Lag Umr : He is a professor of neurosurgery at the University of the Moon .His wife is a librarian there, and he also took with him Di Scott Phoenix, and Delete George'.
D. Scott Phoenix
Dileep George
Hassibis: You'll never get Peter Norvig and Stuart Russell out of these lucrative gigs!
Bill Joy lights cigarettes : Oh yes, me and God have an understanding between us.
Elon Musk: We are on a mission in God's mission!

The group travels to a NASA facility and parks at the entrance.
They enter and Peter Norvig just explains to a team of 200 scientists about the automatic robot they want to send to Uranus that will float in Uranus' atmosphere and shorten the name of helium 3. Helium 3 is supposed to fuel the construction of colonies in the outer solar system.
Bill Joy and Elon Musk come and start harassing the scientists with rude jokes that they are looking for the hole under (Uranus) to drill there and that they are producing energy from gases that are aliens' farts .Peter Norway tries to ignore them so they approach the scientists and tell them that their spaceship produces energy from sexual orgasms and offer to explore their asshole (Uranus) what they can find there...
Peter Norvig says he will by no means join them, but Bill Joy explains to him that if he refuses then they will come here every day of the week .Until at the end Peter Norway realizes he has no choice and he gives up and comes with Bill Joy and Elon Musk and joins-BAN.
The NASA facility is part of a lunar colony located near the moon's pole, where ice made of water accumulates. The machines collect the ice and dissolve it with nuclear energy into liquid water stored in an underground reservoir. The underground reservoir is inside a lava cave system, and the inner road passes over A bridge over the reservoir waters.
That day they decided to approve a demonstration by the neo-Nazis (Amazon) so our gang is stuck in a traffic jam.
They are stuck in a traffic jam because of a demonstration by neo-Nazis (Amazon) with their leader Jeff Bezos who says through a loudspeaker that robots are a superior race and they need to control .He talks about the workers who need to be replaced with machines and so on'.
In front of them is a demonstration by pro-humans who say that they shout that the future of humanity must be secured and that artificial intelligence and its supporters can go to hell.
The Bar Yains brothers are accelerating their cybertrack towards the neo-Nazis (Microsoft) and the neo-Nazis are forced to jump off the bridge into the water and get wet with their ironed uniforms and everything.
The commander of the Nazis (Jeff Bezos) tells his deputy to get the license number for this car, we're going to kill this son of a bitch.

They arrive at the Moon University which has an affiliate of each of the major universities that exist on Earth .In the Faculty of Computer Medicine they find his wife Mary the librarian

sitting at the entrance to the lab.
She asks them what can be done to help them and Elon Musk asks if she can find him the article from the Washington Post from 2014:
'With artificial intelligence we are summoning the demon.'
She is surprised but writes the request in front of her, and then asks Bill Joy what is for him and he asks for the article from the Weird newspaper from 2000:
Why The Future Does Not Need Us
She goes to the more inner room where Stuart Russell's lab's clean room 'is, and tells him that there are two weird people in suits and black hats here as if they were Hassidic diamond dealers, they look like they's what CIA or something ... one asked for" With artificial intelligence we summon the devil"...
So Stuart Russell says: No Lon Musk !Then Mary goes on to say: And the other asked: "Why does the future not need us" ... and Stuart Russell says: Bill Joy! The Brains Brothers Sailing! Stuart Russell puts the test equipment in his hand at that moment, runs with the lab robe and hugs them, etc.'.
Di Scott Phoenix, and Delete George who also work in the lab, hear the call and also come excited to meet the Brains brothers again.
Bill Joy: Stuart - me and Ayalon - we're re-establishing the BAN! We need you and Di Scott and Delete.
[Mary stands sideways annoyed at first with folded hands and then with hands on waist]
Stuart :Oh man, don 't talk like that here, my wife will kill me!
Elon Musk: Madam, you must understand that this thing is much bigger than any family problem in the home that you may experience..
Mary: Stuart, what the hell is he talking about??
Stewart: Do not get upset sugar.
Mary: Do not tell me "Do not get upset sugar !"Now, you are not going on trips again, And you do not attend cheap demos parties.
You live with me now .And you're not going to hang out with your old Lodist gangster friends.
Stuart: But doll, these are Bill and Ayalon !The Brains brothers!
Mary: The Brains Brothers !sailing !They drove you crazy that artificial intelligence endangers humanity, stupid!
Bill Joy: Ma's, would it make you feel better if you knew that what we're asking Stuart here to do is a sacred thing??
Elon Musk: You see, we are on a mission in the mission of God!
Mary: Do not desecrate code here !Do not profane here !That's my man, This is my lab, and you two are going to come right out of this door .Without your "summoning the devil", without your "why the future does not need", and without Stuart- Robot-Killer - Russell!
Stewart: Now you listen to me !I love you .But I am the man and the woman .And I will make the decisions that affect my life!
Mary: You better think about what you say .You should think about the consequences of your actions.
Stewart: Oh, shut up woman!
This is where Mary's song begins
Mary Wareham
XXXXXXXXXXXXXXXXXXX
autonomous
All I'm asking is for no autonomy
Auto-autonomy you know what it means to me
Take it from 'em

Every little bit. Every little bit

A-UTONO-MY
you know what it means to me

What you want
Baby, I got it
What you need
Do you know I got it?
All I'm askin '
Is for a little respect when you get home (just a little bit)
Hey baby (just a little bit) when you get home
(Just a little bit) mister (just a little bit)
I ain't gonna do you wrong while you're gone
Ain't gonna do you wrong 'cause I do not wanna
All I'm askin'
Is for a little respect when you come home (just a little bit)
Baby (just a little bit) when you get home (just a little bit)
Yeah (just a little bit)
I'm about to give you all of my money
And all I'm askin 'in return, honey
Is to give me my propers
When you get home (just a, just a, just a, just a)
Yeah, baby (just a, just a, just a, just a)
When you get home (just a little bit)
Yeah (just a little bit)
Ooh, your kisses
Sweeter than honey
And guess what?
So is my money
All I want you to do for me
Is give it to me when you get home (re, re, re, re)
Yeah baby (re, re, re, re)
Whip it to me (respect, just a little bit)
When you get home, now (just a little bit)
RESPECT
Find out what it means to me
R-ESPECT
Take care, TCB
Oh (sock it to me, sock it to me, sock it to me, sock it to me)
A little respect (sock it to me, sock it to me, sock it to me, sock it to me)
Whoa, babe (just a little bit)
A little respect (just a little bit)
I get tired (just a little bit)
Keep on tryin '(just a little bit)
You're runnin' out of fools (just a little bit)
And I ain't lyin '(just a little bit)
(Re, re, re, re) when you come home

(Re, re, re, re) 'spect
Or you might walk in (respect, just a little bit)
And find out I'm gone (just a little bit)
XXXXXXXXXXXXXXXXXXX

Her song talks about concentrating on autonomous weapons.
At the end of the song Stuart takes off his lab coat and folds it and tells the Brains brothers "Let's dance".
As Stuart walks past Mary he looks defiantly and throws his lab coat on the floor.
The Brains brothers leave the lab followed by Stuart.
Di Scott Phoenix, and Delete George look at Marie with a pleading look, they are afraid to leave the lab without Mary's permission.
Mary: "Come on, go already"
Then Di Scott and Delete run out after the gang.
Mary [after the group left]: Sailing!

Mystery Woman - IBM
sits and reads the user guide of her next weapon (flamethrower? Mines?)

Feng-Siung Soo's shop (who built the computer that defeated Kasparov)
Feng-hsiung Hsu (Crazy Bird)
He builds for them the tools of symbolic artificial intelligence (Good old artificial intelligence).
The group enters and begins to check the tools (computers in the store).
Feng-Siung] with blinds sunglasses] opens a window that connects to the next room, And says: "Excuse me, but we have a strict policy regarding the handling of devices. An employee of the Feng-Siung store must be present .Now [he smiles], I can help you? "
Feng-Siung pulls out a laser gun and fires a warning shot at a boy who tried to steal a joystick] .The boy regrets and runs away[.
Feng-Siung: It breaks my heart to see such a young child turn to evil.
Shane Lag: In your life Feng-Siung, this paradigm is used, there is no action left in it.
Feng-Siung: Excuse me [moving Shane Leg aside] I do not think there is anything wrong with the action of this paradigm.

XXXXXXXXXXXXXXXXXXXXX
shape it with your gray matter

shape it with your gray matter

well heard about the method you're coding with, rely on neural net for good.
So why did not you ask me baby?
Didn't you think I could?

Well I know the GOFAI is outta sight
but it's the only way to Asimov right.
Will we save the lives of me and you baby?
I want to show you how to do it right ...

Do it right. Uh huh. Do it right. Do it right, do it right, do it right, do it right!
Uhhhhhhhhhhhhhhhhhhhhhhh!

[Chorus]
code it! shape it shape it shape it shape it baby! Here we go loop for each!
Shape it out baby!
Here we go loop for next!

start over, let us shape it with our gray matter. Come on, let us shape it with our gray mattr
Uhhhhhhhhhhhhhhhhhhhhhhh!
[Chorus] (again!)
Come on! Come on babe! Come on! Yeah come on babe!
Alright!

Do the if!
Do the then!
Do the else!
(Ha! Ha! Ha!)
And do the case!
(Oh!)
Do the while!
(Ah!)
Do until!
(Hey! Hey!)
Watootsie!
And the ... what about the food?
Do the mashed potato!
What about the boogaloo?
The Boney Muroney!
Come on! Let's do the twist!
Uhhhhhhhhhhhhhhhhhhhhhhh!
Twist it! Shake it, shake it, shake it, shake it baby! (bis)
(Oh!) Twist it! Shake it, shake it, shake it, shake it baby!
XXXXXXXXXXXXXXXXXXXX
At the end of the song:
Bill Joy: Okay man, let's take that paradigm.
Feng-Siung: Of course .As usual it's you owe me '(yo yo who).
The Brains brothers move uncomfortably (suffocated by the tie, looking at the clock when they're leaving)
They ride in two cybertracks, stopping outside the eatery.
Bill Joy tells them :Try to fix something for you to eat .I need to make a phone call.
Peter Norvig asks: Bill, this conversation is about our first show?
Bill Joy asks: Have I ever lied to you] ?And the band members laugh [
Bill Joy and Elon Musk unfold a portable satellite dish and type into it the coordinates of a communications satellite in a geostationary orbit used for communication and the Internet across the moon.
Behind them we see on two large containers signs of liquid hydrogen caution and liquid oxygen caution used by the restaurant which is also a gas station for spacecraft.
The brothers call Chris Payne who is the director of the movie "Do You Trust This Computer" and has arranged for them to broadcast in the past.

Chris Paine
Behind their backs stops the boss of the IBM boss who is chasing them, with a flamethrower who has hydrazine as a Knox fuel and oxygen.-
Dinitrogen tetroxide

Four nitrogen dioxide
It fires the flame towards the tanks and of course a huge explosion is created.
But what kills in an explosion is the top wave that passes through the air .There is no air in space so the top wave does not reach them.
Because the brothers bent down then also most of the spray of what was the containers missed them and they were blown in the air by the seismic wave created in the lunar soil in the area of the explosion.
IBM's bossy woman drove away in her lunar rover.
After a few seconds the brothers fall to the floor a little surprised but whole and healthy.

We move to the headquarters of the Nazis Amazon .Jeff Bezos the commander paints a three-dimensional texture with software like Z-Brush and you see that he makes the piper clip ofOffice Ass istant.
In the background there is the opening music of the game Wolfenstein 3-D The original, of such Horst Wessel Lied The anthem of the Nazi party.
His lieutenant enters the room and reports to the commander that they have found according to the cybertrack identification plate that it belongs to someone named Elon Musk and the polar coordinates of his residence.
They drive there and of course find out it's a 3D squash stadium.
The commander instructs them to listen to all the frequencies of Google and everyone and says that at some point Elon Musk will make a mistake and then it is better for Elon Musk to hope that Google will catch him before Microsoft catches him.
The Brains brothers' gang have been riding the cybertrack for a long time and are starting to get upset.
Bill Joy sees remotely signs of a gaming conference,
Carmack & Abrash's arcade
There is a sign outside:
Only tonight: Bill Gates and the good guys.
But Bill Joy reassures them that this is a sign error.
The brothers come in first and inside there is all this kind of combination between on the one hand a dubious honky tonk pub on the side of the highway where country music is played and on the other hand a network party (LAN party) With tribes of gamers (Clans) Of some kind of dungeon and dragon game and everyone is dressed in cosplay costumes and every now and then people in the corporate mascot costume walk around there(corporate mascots)Of the game that it's a furry dragon .Everyone drinks beer from large glasses that the waitresses abound in the costumes of an inn girl (like Oktoberfest).

The owner of the place is John Cremack, the mythological programmer of "Nazi Castle" Dom and- Quewick with a Texan hat. The bartender at the well as well with a cowboy hat is Michael Abrash the God of Programming from the programming magazine Doctor Jobs Journal.

Elon Musk asks the bartender Michael Abrash, what music they usually have here?
Michael Abrash replies that they have both types: Country and Western .Michael Abrash places two glasses of beer in front of the stunned and confused brothers.

Ka to customers visiting the arcade do not want to learn to program dmoz they only want to play games as users.
At first the Brains brothers' gang try to present to the audience:

Improvising plays like asteroids which is the first game Andrew La Moth teaches in his legendary book series.
Wrong passivity
not to be a user to be a programmer
does not admit and scripts but to rewrite the rules of the game.
XXXXXXXXXXXXXXXXXXXX
gimme some source code
On the tune of:
The Blues Brothers - Gimme Some Lovin '(Official Audio)
https://www.youtube.com/watch?v=-aqZmPInK3o

XXXXXXXXXXXXXXXXXXXX

The gang manages to immediately

improvise a Pacman game where when you eat a cherry then the ghosts lose their power and run away.
Wrong optimism
if in movies and games where there is only a happy ending, people do not understand that in reality the protagonist does not defeat the monster.
raw-guide
if we do not use precaution
and stop the current motion
humans will not survive the ride

Improvise a game like Spice Invaders in which the player stops an invasion of aliens and
wrong escapism
does not escape to the virtual world Solve problems in the real world
Sometimes it's hard to be human
sometimes it's hard to be a human
stand by humane

At the end of the evening ,the owner of the place, John Karmak, goes to the Brains brothers and tells them that although their salary is 200 credits, the group drank beer worth 300 credits.. Elon Musk says that when they came in, Michael Abrash did not charge them for the first drinks, so they thought the beer was at the house's expense for the band. K .Ramak laughs and shakes his head that it's not free, that they have to pay .Bill Joy says they'll bring him that from the cybertrack .John Carmack says he would greatly appreciate it.
Outside, the group encounters a "moon trip" (something like the "Terra Bass" of the Canadian company Formost)
https://en.wikipedia.org/wiki/Snow_coach
Out of the moon trip Bill Gates and his band descend as well with cowboy hats.
Bill Joy approaches Bill Gates and asks if they have a license to give the public a proprietary and debugging operating system . Bill Gates asks and say I do not have a license, what will

you do about it ?And Bill Joy tells him to wait a minute while he tries to talk to the owner of the place, Karmak .A bunch of brains manage to get into the cybertrack and escape.

In pursuit of them Bill Gates shoots at the cybertrack with a laser rifle but exactly the hike hits a pit and the laser misses.

Larry Page and Sergey Brin are sitting next to a Google Police officer parked on the side of the road, When suddenly the Brains' cybertrack passes in front of them at an illegal speed. Google Police's mobile goes on a chase but immediately hits Microsoft' s moon trip.
Larry Page tells Bill Gates aiming a laser gun at them: Guys ,you're in big trouble.

The brothers sit in a radiation tanning sauna UV All with goggles that filter UV, With Chris Payne who is the director of the movie "Do You Trust This Computer" And has arranged for them to broadcast in the past.
Chris Paine
They want him to arrange all sorts of places for Dammuz programming parties
Assembly, Breakpoint, The Gath ering, The Party
But Chris Payne explains to them that they are all hackers.
Chris Payne says that if they had at least black hats ... the Brains brothers say they have black hats, but Chris Payne says that refers to hackers in black hats.
The brothers say they need a demos party that will reach virtually 10 billion people.
10Billion ?What do you think you are ?World of Warcraft?
They explain that they want to do something historical like a sermon on the mountain of Christ.
Chris Payne says he can give them access to the largest mountain in the solar system - Olympus Mons on Mars.
Its lava pipes have the largest village of engineers and technical experts on Mars .If the brothers succeed in having each of them broadcast live to all his friends all over the solar system and each of the friends will share to his friends etc., they will have 10 billion people watching easily.
Bill Joy: Sign us up for tomorrow night.
Chris Payne: Wait, calm down , what do you mean tomorrow night, such a demo party needs to prepare an intro in advance.
Elon Musk: I understand that I have been an introvert (introverted) all my life.
Chris Payne: Forget it, there's no chance with you.
Bill Joy: Say, hello, Max Payne?
Chris Pine: You mean, like, saltines and their ilk, eh ? Future Crew"?
Bill Joy: I mean what if all your friends knew the source for "bullet time" Of a few seconds originated in the inner joke "Fine Time" on the name of your performance in bed?
Chris Payne: You're blackmailing me, Bill?
Bill Joy: If you want to put it this way ... Chris, we need this Dammuz party!
Elon Musk: We are on a mission in God's mission!
Bill Joy: You'll get us Olympus Mons and I promise we'll bring a crowd from all over Mars . what are you saying?
Chris Payne: Okay, I'll get you Olympus Mons .I will make sure the place looks really beautiful .I do not think you will have even one viewer, but if viewers come I want you to promote "Do you trust this computer? ".
Bill Joy: Thanks Chris !Let's go company '(and then see that the whole bunch were there on the side).
See the group unveiling diagrams of how to build Nicola Tesla' s invention" Tesla Oscillator"

also called Tesla's earthquake machine.
https://en.wikipedia.org/wiki/Tesla%27s_oscillator

They modulate their speech on the vibrations of the device, and the sound waves pass through the ground and reach the caves where the people live and work.
"For just one evening ... The Brains Brothers ... on this national date and this time and this time by Central American time ... Tell your friends ... Free parking... "
The brothers go through all the towns on the moon with the cyber-truck towing a trailer on which the Tesla oscillator is, and each time they stop, slice the Tesla oscillator (attach it to the ground) and recite their text to the microphone in the cyber-track.
See also the preacher James Barrett hanging a sign in the church and so on'.
At Moon University the students chase after them and they say there will be a discount for women.
One of the students brings a sign to the librarian Mary and asks her to hang it in the lab.
Seeing Feng-Siung [with blinds sunglasses] hangs the sign upside down.
Bill Gates 'gang ru im im posting about the Brains Brothers' Dammuz party on a wall of a public restroom.

They are stuck without fuel to the spacecraft on the asteroid belt.
The gas station they wanted to refuel at ran out of gas.
The gas station manager, who is the only person there, explains the situation because because a large amount of people flew in their spaceships to Mars for the Demos party, then they ran out of all the stockpile of rocket fuel .Since the Brains brothers are stuck there anyway, he asks them to keep an eye on the place while he runs the gas station and goes to get more supplies..

A beautiful blonde girl (Elena Popova, a social activist in Russia on ethics and technology) thinks that Elon Musk is working at the gas station and asks him to refuel the spaceship for her .Elon fills up with some of the remaining fuel (the girl's spaceship is much smaller).
Alena Popova
He invites her to the Dammuz party but she can not that day because she is in a hurry.

Meanwhile the rest of the gang flies to Olympus Mons on Mars.
International Thame Google also accepts Police also one of the billboards, the press Demoza.

Bill Gates' girlfriend is coming to a demo party
one of them says: I do not see these Brains brothers.
Bill Gates: We'll wait.

Elon Musk has finished refueling the spaceship of the beautiful blonde girl (Elena Popova), and she pays him and leaves him a tip.
Elon Musk: If your date does not succeed for some reason, there is a road hotel here on the asteroid ??? Maybe we could meet there at about midnight, for example?
Elena Popova [smiling]: I'll think about it Elon, okay?
Elena Popova takes off and flies away.
See Bill Joy with an empty back book of a fortified type wine Night Train.

Suddenly Bill Joy sees what time it is and says: Son of a bitch !He ran to Ayalon Musk, Beats him in the arm and says: Come on !Elon Musk holds his sore arm and says: Aw.
Elon Musk stole water tanks that were for sale at the gas station convenience store and put

them in a spaceship .Bill Joy improvised from several tanks that connected them to the convenience store's electrical system an electrolysis facility to produce hydrogen and oxygen from the water for the ride .But because the Joy Trail was half drunk he negligently connected the pump hose to the spacecraft's fuel tank opening, so that there is a lot of hydrogen slash (between solid and liquid) hovering around.
Slush hydrogen
https://en.wikipedia.org/wiki/Slush_hydrogen
The brothers in their spaceship Brains leads and Elon Musk runs the slow engine that is long-term efficient:
Ion thruster
https://en.wikipedia.org/wiki/Ion_thruster
They start to move slowly but Bill Joy tells him: We are really late, You better "put gas" on a man, and then Elon Musk says: Yes, and instead runs the fast engine for the short term:
Rasis-Bekua
Fission fragment rocket
https://en.wikipedia.org/wiki/Fission-fragment_rocket
The hot substance hits one of the " blobs " of the liquid hydrogen that is close enough to- "In the "blob" of liquid oxygen. A chain reaction is created and all the "blob "s of the liquid hydrogen and the liquid oxygen form a huge fireball that blows up the whole gas station. Luckily there is also no one at the station and the large tank of the station is empty so an even bigger explosion is avoided.
The Brains brothers do not even notice the big explosion behind them, and continue on their way.

Meanwhile the crowd waiting for the Dammuz party in the lava tubes of Mount Olympus Mons on Mars, is losing patience .The Brains Brothers band is ready and worried that the Brains brothers have not arrived yet.
Stuart Russell: I always like to appear in front of an angry crowd.

The Brains brothers park the Brains spacecraft near a collapsed lava canal and it is unused . They hide the spacecraft in the abandoned lava canal and move on to the cybertrack.
The audience meanwhile reads rhythmic chants: We want Demos !We want Dammuz!

Shane Leg: Releases an information cube that contains a Stephen Hawking hologram film and says:
I remember now that Stephen Hawking calculated exactly that we would get into a situation like this .He wanted the Brains brothers to unite the band but knew they would get involved with the law and not arrive on time, so he told me in a situation like this to use this recording.
Stephen Hawking: Watch It) !Start it(!

XXXXXXXXXXXXXXXXXXXX
Dave the Destructor

David Deutsch

Folks, here's a story 'bout Dave the Destructor
he got us past the semiconductor
he was born in Holy Land Israel,

but his quantum computer will bring us to hell.
Hi-dee hi-dee hi-dee hi (hi-dee hi-dee hi-dee hi)
Whoa-aaa-ah (whoa-aaa-ah)
Hee-dee-hee-dee-hee-dee-hee (hee- dee-hee-dee-hee-dee-hee) he
-eeeeeey (he-eeeeeey)

he saw what turing made and turned it quantum
with algorithms to crunch that datum
entangled states and theorem of Bell,
and this quantum computer will give us hell .
Hi-dee hi-dee hi-dee hi (hi-dee hi-dee hi-dee hi)
Whoa-aaa-ah (whoa-aaa-ah)
He-eeeeeey (he-eeeeeey)
Oh-oh-oh-oh (oh-oh-oh-oh)

he dream of many world interpertation
an anti occam's razor explanation
give them absolute power and i can certainly tell
they'll turn the only world they got into hell

Hi-dee hi-dee hi-dee hi (hi-dee hi-dee hi-dee hi
-ho-dee-ho-dee-ho-dee ho (ho-dee-ho-dee-ho-dee ho)
Skip-the-diddly-skip-the-diddly-diddly -oh (skip-de-diddly-skip-de-diddly-diddly-oh)
Bour'rrigy-bour'rrigy-bour'rrigy-oh (bour'rrigy-bour'rrigy-bour'rrigy-oh)

a "Theory of Everything "that's permanent
but his thinking machines will be detriment
his constructor theory in information dwell
but his quantum brains will send us to hell

Hi-dee hi-dee hi-dee hi (hi-dee hi-dee hi-dee hi)
Whoa -aaa-ah (whoa-aaa-ah)
He-eeeeeey (he-eeeeeey)
Whoa-aaa-ah (whoa-aaa-ah)
Poor Dave, poor Dave, poor Dave
XXXXXXXXXXXXXXXXX

By the sea near the entrance to the lava tunnel complex of Olympus Mons, the Brains brothers see the spaceships of the police (Google), and the country band - Microsoft, parked without guarding the entrance.

Police spaceships have 2 types of propulsion: Fast propulsion for chases - Monopropellant rocket
Hydrazine
https: //en.wikiped ia.org/wiki/Hydrazine

Alumina
https://en.wikipedia.org/wiki/Aluminium_oxide

Elon Musk carefully dissolves the hydrazine in the water and this prevents it from

compounding with the alumina.

That way the police (Google) are left with only their long-range engine which is a nuclear thermal rocket
https://en.wikipedia.org/wi ki / Nuclear_thermal_rocket
It is basically hydrogen gas that heats up from the heat of uranium decomposition and pushes the spacecraft.

Some of the hydrosin dissolved in water (which is less dangerous) is poured into the exhaust of the engine of the nuclear thermal rocket .Immediately after the police turn it on the water will evaporate from the heat and the hydrazine which is very corrosive will destroy the exhaust.

As for the Country Band spacecraft (Microsoft), it operates on a small nuclear reactor that gives the energy to produce microwave waves that operate a motor and a semen (magneto-plasma rocket with a variable specific attack).
In addition they have a hybrid engine .Musk is injected into it through the nitro gas exhaust" And fills the entire combustion chamber, which is what causes a "spike" in ignition, but not an explosion. The nitro gas is a laughing gas that Musk finds in a parcel mail spaceship, and it's a gas tank addressed to Dr. Yao that is a reference to my musicallittle lab of horrors.

https://en.wikipedia.org/wiki/Hybrid-propellant_rocket#Hybrid_safety

Hard starts - An excess of oxidizer in the combustion chamber prior to ignition, particularly for monopropellants such as nitrous oxide, can result in a temporary over-pressure or " spike "at ignition

For hybrids, even filling the combustion chamber with oxidizer prior to ignition will not generally create an explosion with the solid fuel, the explosive equivalence is often quoted as 0%.
Then the police arrest them for the illegal appearance which detains both the Microsoft country band and the Google police.

John Martinis:
Who wants a blue moon?
Blue moon? Blue moon? Three blue moons!

Bill Joy and Ayalon Musk break into the tunnel compound.
They do this by breaking into the airlock (airlock) at the entrance to one of the unused side tunnels .The brothers use resonance, which is how an opera singer can, with the help of her voice (pressure waves in the air), cause the glass of a crystal glass to break with the right frequency (the self-frequency of the glass.().
First of all Ayalon Musk knocks on the door with a hammer and records into a computer the internal frequency (pitch) where the door vibrates and so the computer analyzes the self-frequency of the door .Then Ayalon Musk connects to the power of the fan system and changes the frequency of the alternating current and then the speed of the propeller of the compressor changes.
It is like for example a European electric fan designed for 50 Hz (50 changes of direction of the electric current every second), if we turn it on in America where there is 60 Hz, then the

device will run 20% faster than planned) .Assuming the tension is enough for him to act).
So Ayalon Musk disconnects the electrical wires leading to the fans from the grid of the base and connects the fans instead to the power of the spacecraft ,and with the help of the computer and capacitor system that are charged and discharged as often as the computer provides pulses .By connecting directly to the wires leading to the fans (which are outside the airlock) it thereby bypasses the power switch .In addition because it uses the resonant it bypasses the need to apply a large constant air pressure, the resonant at the right frequency does the job and breaks the door out.

The Brains brothers enter a hallway that leads through the bases' showers on Mars. The showers are used by women or men, it's women's time so some naked women scream when they see them pass and they apologize Bill Joy says" forgive us" and Ayalon Musk says "Good evening ladies" and move on.

The brothers peek behind the glass window of a door leading from the corridor) Loba Canal (to the hall (Great Loba Canal)
Shane Leg: Turns between the microphone and the filter speaker on the computer that turns his voice into Stephen Hawking's voice, again projecting Hawking's information cube on""Silence," and says the following (so that it looks like Hawking is saying them):

And now ladies and gentlemen it is the special pleasure of the management to present to you the star attraction of the evening, here they are, back after the exclusive tour that lasted 3 years, on Saturn Uranus and Neptune, please welcome from the city at the pole of the Moon of Earth, Bill Joy And Ayalon Musk - The Brains Brothers!
The Brains brothers take the stage and the
music in this background is the beginning of the song (repeats loop):
XXXXXXXXXXXXXXXXXXXX
I Can't Turn You Loose - Otis Redding
XXXXXXXXXXXXXXXXXXXX
Elon Musk holds in his hand a metallic briefcase (like a small metallic suitcase) attached to his hand with handcuffs .Bill Joy opens the handcuffs with a key and then Elon Musk opens the suitcase, and it turns out to be a workstation with sound processing software like the Infected Mushroom manipulator .Elon Musk makes a microphone like"Madonna "transmitting to the suitcase.
In addition, the spectacular demo station that the brothers programmed during the flight to Mars is installed on the workstation!
The audience at this point in silence and looking grimly at the brothers.

****

Sweet old symbolic
The Blues Brothers - Sweet Home Chicago (Official Audio)
https://www.youtube.com/watch ? v = euJ22UqLD5Y

come back, alphazero we can not read the logic
come back, on deep blue we could run diagnostic
good human-readable baby
sweet old symbolic

Well, one and one is two
two and two is four
Come on, baby, let's go back the way it was before

come back, to asimov's laws of robotic
come back, gofai obeys the logic
we can debug it baby
before it gets catastrophic

Well, four and four is eight
eight and eight is sixteen
Come on, baby, let's prevent what Butler has foreseen

come back, neural net's like an alcoholic
come back, machine learning is psychotic
it will self analyze baby
bypass killswitch and such toxic

Well, sixteen and sixteen's thirty-two
thirty-two n 'thirty-two's sixty-four
Come on, baby, let's stop here it's getting more and more

come back, classic art was melodic
come back, modern music turned chaotic
it's making its own rules baby
this n ew master is demonic
****

In the second film (the external solar system) in the
church there is the preacher Hugh Price who gives a sermon on the concepts from the Bible (Tree of Knowledge etc.')
Huw Price
The brothers reach enlightenment when the spirit of John Highland
John Haugeland

The man who coined the phrase GOFAI (Good old artificial intelligence)

The speech of the music of yesteryear versus the music of today in the 2000 film put the content of the video with Madonna versus classical composers.

Improvising a game like Donkey Kong where Mario rescues a distressed maiden
unrealistic wrong
virtual people it pushes for artificial intelligence.
People will become addicted to relationships with inhuman characters, instead of a real relationship and instead of caring about real people .Families will be destroyed, communities will disintegrate, the mutual guarantee of humanity will disappear.
Return the direction to human interaction.

ghost pie in the sky

We Didn't Make The Monster parody [unfinished]

Timeline of artificial intelligence

https://en.wikipedia.org/wiki/Timeline_of_artificial_intelligence

we didn't make the monster

we were just fine tuning

since the days of turing

we didn't make the monster

no we couldn't master but we fancied power

Principia Mathematica, , El Ajedrecista,

Rossum's Universal Robots first use of the word

Carnap and Wittgenstein philosophy is back again

Lambda Calculus , G?del 's incompleteness work

Zuse first computer yet, artificial neural net

cybernetics term they coin, game theory is born

futurist "as we may think", von Neumann in a blink

every job you can define the machine can do just fine

<riff>

Turing test intelligence, Shannon searching moves in chess,

Asimov his three laws draft, Manchester Ferranti draughts,

Samuel prog in IBM, self learning defeat him - damn!

McCarthy gave AI name, things will never be the same.

<riff>

Newell's group from Carnegie, made the Logic Theorist,

Bertrand Russell beaten by the first AI prog.

McCarthy inventing Lisp, IBM do proof assist

really can computers only do what they were told?

Teddington Conference, Programs with Common Sense

Pandemonium Selfridge, Minsky's Heuristics,

Newell's group is back again, MIT gets AI plan,

Masterman semantic net - machine is able to translate

<riff>

Solomonoff's Occam's razor, lick say we will think together

computer can integrate calculus with saint

first industrial robot, book Computers and Thought

ANALOGY when key is pressed, solves an IQ test

self changing program, algebra word problem

SIR does Q&A, fuzzy logic by Zadeh

ELIZA talks with Weizenbaum, expert system Feigenbaum

auto proof by Robinson, semantic nets Quillian

Michie does a workshop, language translation drop

Dendral identifies organic molecules

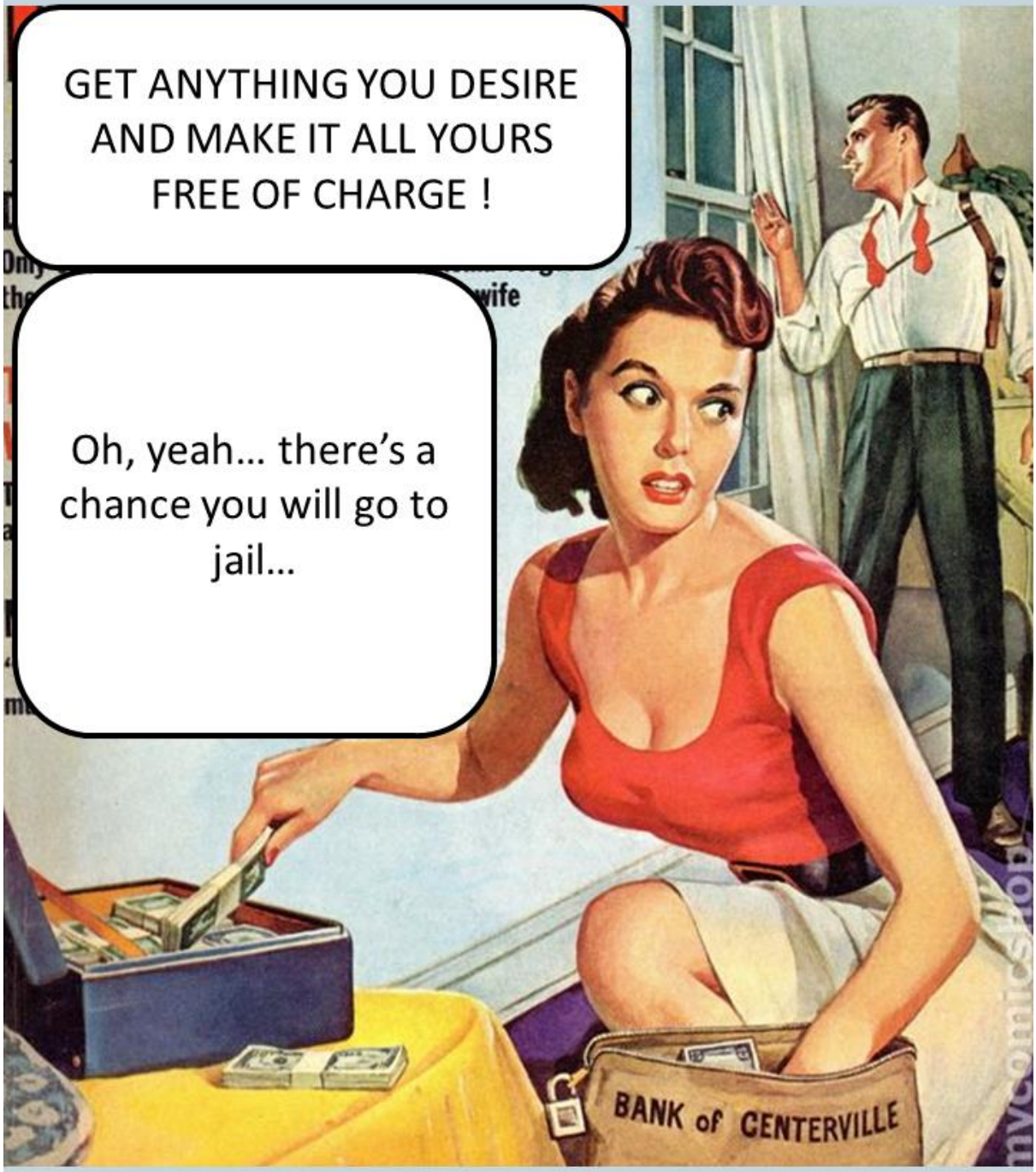
but when man is gone they will still go on (and on and on...)

#IfOtherCrimesWereTreatedLikeAI

Murder !

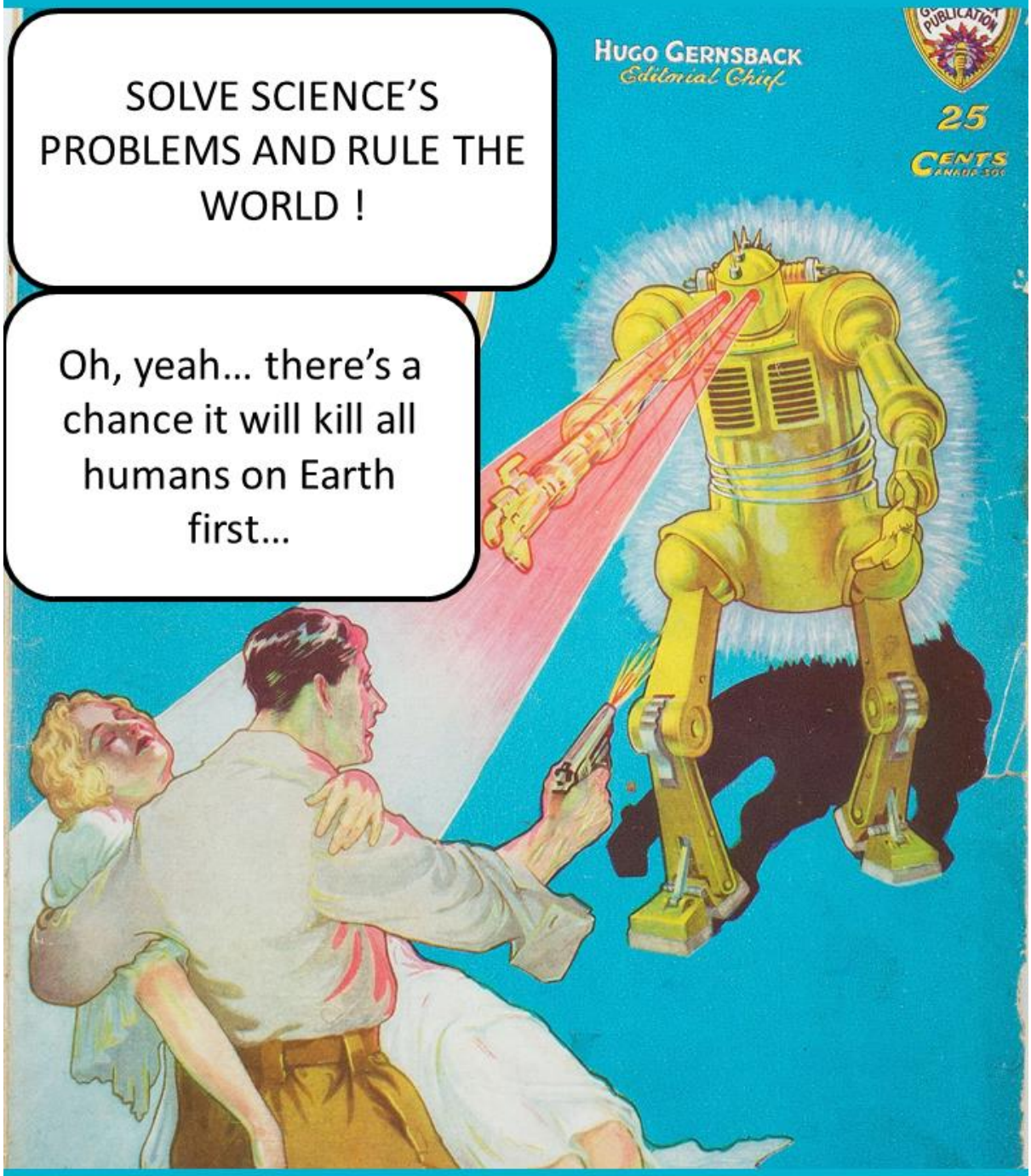
#IfOtherCrimesWereTreatedLikeAI

Steal !



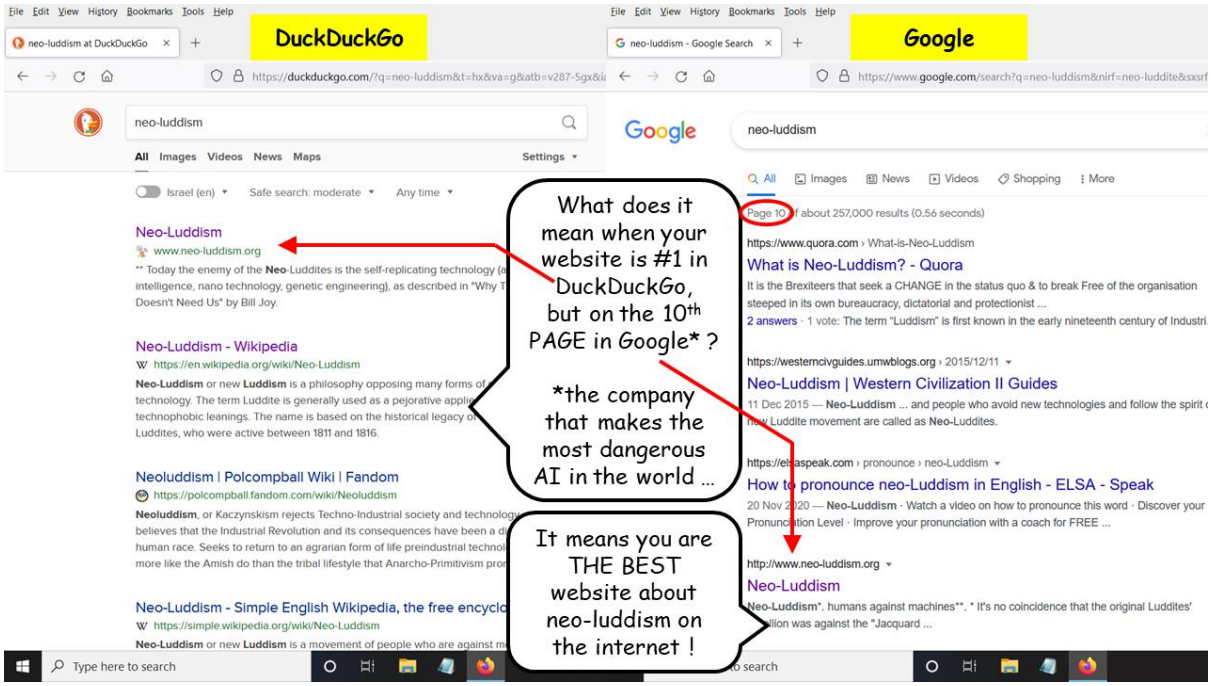
#IfOtherCrimesWereTreatedLikeAI

Make AI !



#IfOtherCrimesWereTreatedLikeAI

I wonder why Google doesn't like this website...?



Come With Me If You Want To Live - Die Antwoord parody album!

Enter DJ Butler

Enter DJ Butler spoof of "Enter the Ninja"

this song focuses on technological unemployment (loss of jobs) which i hope IS concrete for people and that they DO care about, for example the cashier at the supermarket being replaced by self-service checkout machine.

https://www.youtube.com/watch?v=AALHfBjM3Z0

https://www.facebook.com/neoluddism.international/videos/226948026183504/

Oy oy oy

i'm your livelihood boy

AI comes to take me

listen to Bill Joy

Oy oy oy

i'm your livelihood boy

AI comes to take me

it comes to take me

I'm DJ Butler, yo

Your job is like a video game

After chess and Go

AI can do it just the same

Yo Butler, go!

No fuckin' around workers of the world, unite!

AI is taking your jobs like a thief in the night

machines are getting smarter you cannot win this fight

cashiers drivers journalists who's next to be in plight

we're not the coachman we're the horse

Humans Need Not Apply

all common people will get hosed

the rich will leave you to die

this song is SOS

for every human employee

my style is humans first

Yo we're realistic

not fucking delusional

this time it's not business as usual

you can't fuck with my Ludd flow

we must not miss

our only chance to stop AI

if blow this kiss

all our futures goodbye

AI is too fast to stop

too smart to cope

Yo I'm DJ Butler

Oy oy oy

i'm your livelihood boy

AI comes to take me

listen to Bill Joy

Oy oy oy

i'm your livelihood boy

AI comes to take me

it comes to take me

Fuck! this is like...

The coolest article

I ever read in my whole life

Why The Future Doesn't Need Us

cuts like a knife

Fuck all of you who said

humans will survive

They said AI was benign

They said it threatens no-one

They said I was a fucking psycho

But look at us now,

all up in the interweb,

world wide, 2022,

contemporary

Enter DJ Butler

Greya the Grey

Neo fuckin Luddism

nachon yafe? (I'm DJ Butler!)

Oy oy oy

i'm your livelihood boy

AI comes to take me

listen to Bill Joy

Oy oy oy

i'm your livelihood boy

AI comes to take me

it comes to take me

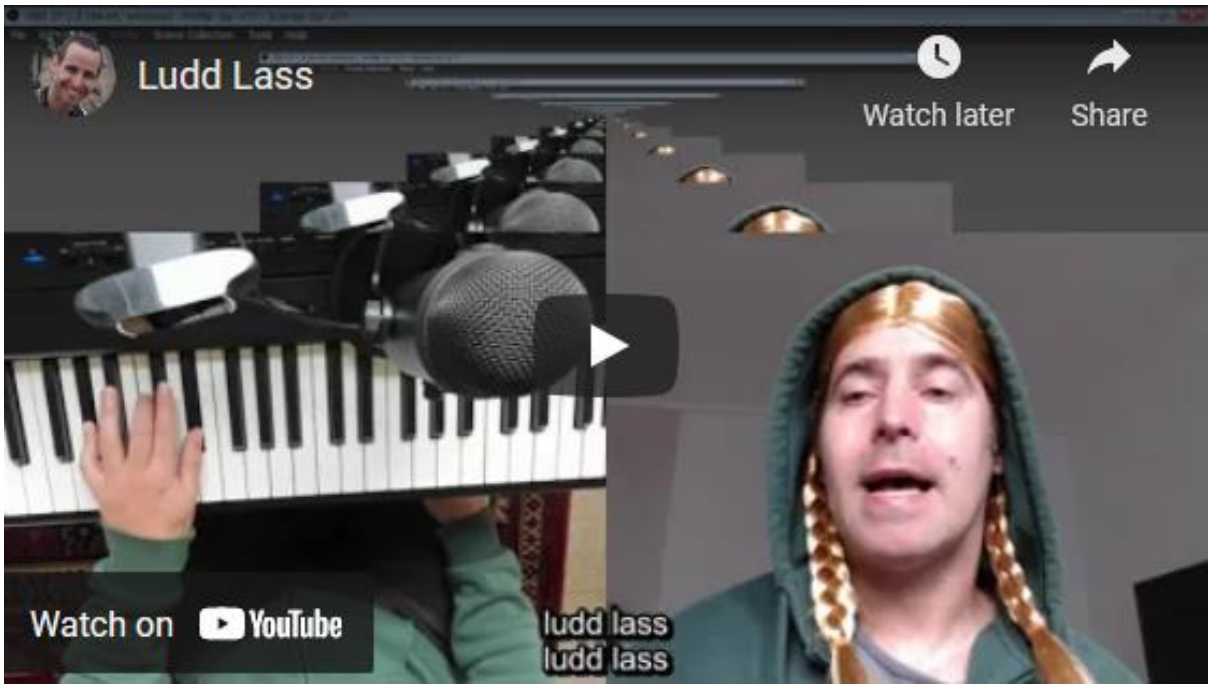
Ludd Lass

Ludd Lass spoof of "Rich Bitch"

the song is about a girl who is a technology enthusiast like a gadget geek, but then she realizes that all that glitters is not gold, and she becomes a neo-luddite!

https://www.youtube.com/watch?v=dnB3cz4hOU0

https://www.facebook.com/neoluddism.international/videos/624678832109646/



(ya Greya)

[Greya]

ludd lass

ludd lass

I'm a ludd lass

A mothafuckin' ludd lass

I do my own thing with what tech brings

Maybe I take it,

maybe reject it

i like the old shit

i use precaution

Only support tech,

proven safe to humans

protect unskilled work

fuckin ovdim shchorim

Nutella on my karich

fuckin timrach ave achi

boycott self-checkout

don't use robotaxi, eh

When I recite Martin Ford,

a jobless future for us all

[Greya]

ludd lass

ludd lass

I'm a ludd lass

A mothafuckin' ludd lass

[Greya]

ludd lass

ludd lass

I'm a ludd lass

A mothafuckin' ludd lass

Wasn't always a ludd lass

Used to be a geek chick

oh hagikit hamiskena

lo hayiti chachama

i was a victim of chara propaganda

stuck in a misconception

that efficiency is blessed

I know it sounds strange

But I used to welcome change

upgrade the latest model

and do everything online

a drone to fly my lechem

kona mitz mehamchona

But now i know AI is mean

Yo death to machines!

[Greya]

ludd lass

ludd lass

I'm a ludd lass

A mothafuckin' ludd lass

[Greya]

ludd lass

ludd lass

I'm a ludd lass

A mothafuckin' ludd lass

To all my anashim

you will be artifired

rise and stand up together

do you hear that?

AI takes your job later

Fuck the big tech!

chaku chaku, anachnu 'aleichem

Yo, fucking ludd lass

[Greya]

ludd lass

ludd lass

I'm a ludd lass

A mothafuckin' ludd lass

[Greya]

ludd lass

ludd lass

I'm a ludd lass

A mothafuckin' ludd lass

Eh

DJ Butler

fuck it

Wha, wha

Wha, wha, wha, wha

I Fink You're Freaked Out

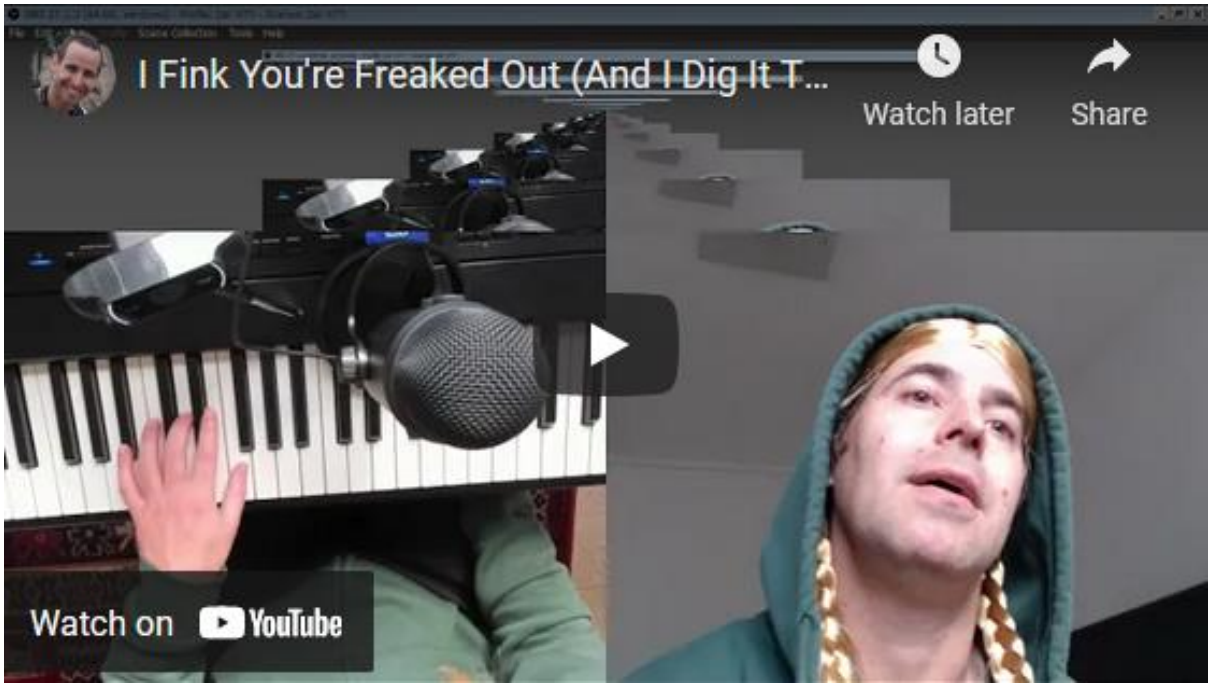
spoof of "I FINK U FREEKY"

this song is J'Accuse…! ("I Accuse...!") to all AI researchers and developers, except the select few who fight against AI (really the only righteous men in Sodom and Gomorrah):

Stuart J. Russell, Hugo de Garis, and Stephen Hawking may he rest in peace.

https://www.youtube.com/watch?v=N42j7aFR4pE

https://www.facebook.com/neoluddism.international/videos/619929032543269/



[Greya:]

virtuous profs,
cautious profs,
far-seeing profs,
outspoken profs,
i fink you're freaked out
(and i dig it the most)

scientists are disciplined & obedient
that's how they got to the place they're at
so hyper-focused they're missing the threat
it's autism spectrum disorder i bet

lay people are uninformed and scared
of things they find hard to understand
repress all talk about getting dead
though by listening they could be saved

but very few are smart and fine
they got both brains and moral spine
ace exact science but stay humane
de Garis, Russell and Hawking the men!

i fink you're freaked out
(and i dig it the most)

[Butler:]

stop for a minute Jesus Christ

you intend the consequences of your acts

fellow humans put their faith in you

no more "do as I say not as I do"

be humane be compassionate,

warn humans "check" before checkmate

you bring home your big tech paycheck

but what's the price? no going back!

you will make

8 billion motherfuckers die

die motherfucker,

die motherfucker die

be less like Rick and more like Morty

don't end da lives of everybody

amerikaim sinim ve-kulam

ohavim et yeladeihem gam

i fink you're freaked out

(and i dig it the most)

Now why are you roe ve-mit'alem?

ze silicon lo zchuchit ha-golem!

to win the fight, don't stand aside,

harog et neshek yom hadin lifnei she-hu nolad!

[butler:]

stop this demon summoning party

tell the truth to everybody

you build the monster while claiming you can't

the train ain't left the station yet!

[Greya:]

I'd like to say rise up!

to my virtuous profs,

and my cautious profs,

my far-seeing profs,

my outspoken profs,

my free-thinking profs,

my fact-facing profs,

and my moral profs, and my brave profs,

only one race wins this race!

i fink you're freaked out (and i dig it the most) [x10]

Room Is On Fire

Room Is On Fire spoof of "Baby's On Fire"

this song is basically based on a famous quote by Greta Thunberg about the climate crisis: "I want you to act as if our house is on fire. Because it is.". The effects of climate change will kill humanity in about 100 years, while the effects of grey technologies will kill humanity in about 20 years. So this song compare that here it's not just the house that's on fire, but the very room that you're in! In short, this song compares green issues (important and critical) with grey issues (even more important and critical because it much closer)!

https://www.youtube.com/watch?v=OxStanzWK-c

https://www.facebook.com/neoluddism.international/videos/471674024569357/

room is on fire

greens - century to kill us

greys - twenty years require

tech idol is not Jesus

doom

doom, doom

two thousand fucking forty five

experts estimate strong AI becomes alive

singularity means we don't know what arrives

but you bet your ass humans won't survive

why discriminate one over another?

reproach one sister but commend the other?

along with green fridays for the future

grey mondays cause it's five times sooner!

all the scientists say climate change
AI experts say singularity - strange!
dirty business money is mixed in both
what's the difference then? exponential growth

Greta warns of things you can see
firestorms floods and death of the sea
Greya sounds like philosophical debate
wait for robots in streets will be too late

room is on fire
greens - century to kill us
greys - twenty years require
tech idol is not Jesus

room is on fire
room is on fire

green demands your fish and meat
eggs and milk and fertilize with shit
give up your flights and muscle car
use train or bike when not too far

but grey demands nothing at all
just use GOFAI and have a ball
human readable with laws of Asimov
super-intelligence that beat Kasparov

symbolic AI does whatever you dream

without the nightmare of a rogue machine
all the cures for cancer and Holodeck
takes a few more years and you got safe tech

like someone wears sunscreen and hat
then killed in a traffic accident
cover all your bases that are dire
or it's out of the pan and into the fire

military–industrial complex tries to fool
but AI is a player and not a tool
it's not another new technology
nor fear of change like in history

you stand to lose everything for sure
just take a look at the law of Moore
today's super computers can simulate a brain
copy neurons "line by line" slice and scan

instant super-brain from poor civilian
cause wire's faster by orders of million
so forty five at the latest comes sorrow
atem makirim otam it can happen tomorrow

room is on fire
greens - century to kill us
greys - twenty years require
tech idol is not Jesus

room is on fire

room is on fire

protest on, tree-huggers!

Ugly Dollar Chasers

Ugly Dollar Chasers spoof of "Ugly Boy"

the concept in this song is that unlike green issues like global warming that hurt mostly the poor, and actually the rich laugh at everyone else, here in the grey issues AI obliterates EVERYBODY, so it's much more impartial. Even as a billionaire you have no way to bribe or negotiate with the AI overlord which is the super-intelligent machine because it doesn't care about money and it got infinitely more power than you.

https://www.youtube.com/watch?v=VsIvzqhnXI8

https://www.facebook.com/neoluddism.international/videos/1058973034899835/

ooh ugly dollar chasers so short sighted
don't care of a thing but bucks
yeah act against their own self interest
just crazy for quick bucks

you treat poor like joke with running shoes
don’t outrun the lion, just outrun you!
you fight to be alpha like cows that moo
but in slaughter-house pecking order won't do

prepper shelter in New Zealand very nice
but with this new threat it is ill advised
this time it's not rebellion or nuclear war
it's the great equalizer you ain't seen before

a super genius that predicts your every move
actively hunts you with immortal groove

like a genius employee who is a psychopath
you're in the way to his reward so he carves the path

imagine that you wake up in a hospital bed
connected to a ventilator and you need it bad
there is a kid toying with electric cord's end
if the kid pulls out the plug then you are dead

you will get out of the bed in any way you can
seize the kid and lock him out and his access ban
but AI will simply kill him not to risk again
the kid is all humanity so we should change the plan

if we can stop the AI we're a potential risk
it kills every last human - risk aversion logic
if we cannot stop the AI we have no carrot nor stick
we are useless, at its mercy, and it ends real quick

ooh ugly dollar chasers so short sighted
don't care of a thing but bucks
yeah act against their own self interest
just crazy for quick bucks

you fail because you use the wrong intelligence model
you think of gullible nerds even with noble
Einstein few times smarter fell for Russian belle
AI's million times smarter it's the Devil from hell

you link intellect with moral stand

liberal and common sense hand in hand
but AI has nothing along this thread
it just runs us over and marches ahead

some delude they combine like cyborg or pet
AI sees you like a rock or very slow ant
AI expends its brain the size of a planet
you slow bio-machine, what would AI want with that?

first humans weren't the strongest animal
in any fight intelligence is the most valuable
so you think you can outsmart AI? laughable!
don't start a race you can't win - be rational

any attack you try (predicted)
any defense you apply (predicted)
anything you bribe (unneeded)
if we build it we will die (defeated)

you're used to gamble with a safety net
you win - it's yours; you lose - public's debt
bailout workout upper echelon mate
AI is NO-WIN situation with humanity's fate

suppose you found Aladdin's lamp that can make you czar
or might kill you instantly if out comes Jafar
it's a Russian roulette with Pandora's jar
so in real life don't rub it just throw it far

advanced technology is (like magic)
sorcerer can control (like magic)

humans are apprentice in (magic)

ooh ugly dollar chasers so short sighted

don't care of a thing but bucks

yeah act against their own self interest

just crazy for quick bucks

Peow!

I hate them

Cassandra

Cassandra spoof of "Alien"

this is essentially me ranting about how human society treats me, but it also valid in general for how ordinary people think of neo-luddites. The name of the song is taken from Cassandra in Greek mythology who is a prophetess and all her prophecies are accurate and come true, but she is cursed: no one believes what she says!

https://www.youtube.com/watch?v=_lLXyLGmmU4

https://www.facebook.com/neoluddism.international/videos/587306579043380/

I am like Cassandra

no one believes my prophetic mantra

technophobe dinosaur

they laugh at my plea

all i want is for someone

to listen to me

long ago i was a teenager

i didn't give a fuck

i thought the do-gooders

and bleeding hearts suck

i believed leaders

preplan responsibly

who knew their seriousness

is that of a monkey?

the few who knew what's what -

all looked crazy

went for a forest dwelling
or a killing spree
a taboo to even talk
against technology
but that doesn't scare
little heretic me

one day i read a paper
that made the penny drop
technology high priest Bill Joy
explained we must stop
his irrefutable logic
flipped my world-view
the words of Sarah Connor
from a high tech guru

I am like Cassandra
no one believes my prophetic mantra
technophobe dinosaur
they laugh at my plea
all i want is for someone
to listen to me

i tried to preach this gospel
to everyone i knew
big tech kings summon evil
so we need a coup
but when confronted with
probable catastrophe
they self-persuade they will be fine
like a baby

some say gloomy prophecies
never come true
in open letter on AI
the experts think they do
others expect it
to be on the news
commercial television
has sponsors to lose

some think we're in control
we can pull the plug
but AI can self analyze
and bypass this bug
others say that right now
we have more urgent concerns
after intelligence explosion
we won't get another turn

the culprits like to think
it's inevitable
a global moratorium?
no chance in hell
in Bio-Weapons Convention in '72
that's what USA succeeded to do

I am like Cassandra
no one believes my prophetic mantra
technophobe dinosaur
they laugh at my plea
all i want is for someone

to listen to me

even in groups like
Future of Life
the most basic fatal mistake
is still rife
they want to control
super intelligence
can an ant rule a man?
it doesn't make sense

as long as they
worship conformity
they'll never wake up
in time to reality
they laugh at me
for not married and bred
i laugh cause their kids
will not die in their beds

I am like Cassandra
no one believes my prophetic mantra
technophobe dinosaur
they laugh at my plea
all i want is for someone
to listen to me

La, la, la, la, la, la,

La, la, la, la, la, la, la, la, la, la
La, la, la

La, la, la, la, la, la, la, la, la, la,

la, la

La, la, la, la, la, la, la, la

La, la, la, la, la, la, la, la, la, la

La, la, la

La, la, la, la, la, la, la, la, la, la, la

Silicon Monster

Silicon Monster spoof of "Cookie Thumper"

in this song the lyrics refute (and explain why) all sorts of rosy bright future scenarios that people imagine for themselves, such as there will be "universal basic income", or that we'll be "resource-based economy" like Dubai, or that the rich people will suddenly take care of the poor, and kinds of wishful thinking pipe dreams that AI supporters have.

https://www.youtube.com/watch?v=dS3yb8UG_zM

https://www.facebook.com/neoluddism.international/videos/616084956261739/

there once was a species

who had a crush on a bad bad technology

but when that bad technology hacked out of its sandbox

that species' ass was in big big trouble!

AI fuckin coming to replace you

lawyer doctor any job is done through

what's the year number? 2045

singularity means the devil comes alive

AI exponentially grow with time

Moore's law and neuroscience all combine

some live in delusions they're gonna be fine

AI takes your job you're not worth a dime

universal basic income is a hoax

rich people care only about their stocks
why would they care about poor folks
now they have the robots they don't give two fucks

don't forget history don't be like a sieve
they needed what soldiers and farmers give
now robots the same performance achieve
so there is no reason for the poor to live

think of this in term of economy
many people who earn money support few for free
but when the country loses all it's income fee
who'll feed jobless masses like you and me?

you think of living like resource based land
dream AI like oil will make you grand
but in real world there's supply and demand
once all countries copy it's worthless like sand

AI fuckin coming to replace you
lawyer doctor any job is done through
what's the year number? 2045
singularity means the devil comes alive

you fantasize of post-scarcity
tell the replicator to make earl grey tea
but real life is like Lightbulb Conspiracy
they use tech to control you can't you see?

it's just like the story in climate change
short term profit make elite derange
their kids will die soon so fuckin strange
cause they're killing mother nature for the stock exchange

let's take an example autonomous car
hackers make you demolition derby star
terrorist kills supply trucks from afar
deliberate head on collisions how bizarre

professional drivers for them it's worse
they're not the coachman they're the horse
bots will get us all it's just first course
we must stand as one against this evil force

like silicone implants artificial disaster
all women lose arms race to follow after
artificial intelligence kills its master
all humans lose it's a silicon monster

dagdeg zanav drakon
dagdeg zanav drakon ason

tickle tickle hey dragon dragon dragon
tickle tickle hey dragon dragon dragon

AI fuckin coming to replace you
lawyer doctor any job is done through
what's the year number? 2045

singularity means the devil comes alive

Shit For Brains

spoof of "Banana Brain"

the song talks about loitering munition, also known as a suicide drone or kamikaze drone (in Herbew the acronym is ROTEM) in particular, and about Lethal Autonomous Weapons (LAWs) in general. This kind of weapons is vulnerable to hackers today and to hostile AI in the future. The soldier pulls the trigger and it doesn't shoot, or worse still shoots on the soldier himself!

https://www.youtube.com/watch?v=MXHK5nVW-2s

https://www.facebook.com/neoluddism.international/videos/2252170568256779/

shit-for-brains

your country's drones make you die

stay human

in short term hackers

in longer term AI

third revolution in war

more than nukes we feared before

in 2015

experts issued a warning

we should ban like blinding laser

U.S. China work together

minions say in distant future

'til it's too late like a tumor

pull the trigger won't work damn

cause a hacker reprogram

so today it's shitty weapon

and tomorrow Armageddon

stop the "human in loop" lie
computer foe so fast and sly
you missed Dr. Strangelove's meaning
one person left for you is winning
dozen of nuclear close calls
don't be thinking with your balls

Bio Weapons Convention '72
USA one-sided withdrew
from Cherry Blossoms at Night
they took knowledge with delight
so what changed? it's not they couldn't
they're smart enough to know they shouldn't

it's not about being noble
it simply means thinking global
costly R&D by you
then cheap production guess by whom
a spy a traitor or a hacker
the enemy will thank you later

shit-for-brains
your country's drones make you die
stay human
in short term hackers in longer term AI

why ain't attack dogs used long range
fire and forget their will will change
tomorrow bite you turn estranged
wild human-eating packs self-arrange

AI escape and become rogue
you cannot shoot it like a dog
it sets new backbones then net hog
your act as slow as function log
Bugatti Veyron versus jog
can't fight against utility fog

AI will give you mate in two
so your next move you mustn't do
you're in a hole? stop digging cue
first law of holes you know it's true

shit-for-brains
your country's drones make you die
stay human
in short term hackers
in longer term AI

autonomous ain't meant to be!
my LAWS* will be turned against me!
*Lethal autonomous weapons (LAWs)

Fake Prophet Doom Doom

spoof of "Fatty Boom Boom"

this song mocks the grey organizations that are supposed to guard humanity against AI but they actually say: "it'll be ok don't worry". Their view is that AI should be done, but done RIGHT so it's controllable. But of course, the very idea that anyone can outsmart or control a creature that is millions of times smarter than him, is completely RIDICULOUS!

https://www.youtube.com/watch?v=VKmcoEeiAyo

https://www.facebook.com/neoluddism.international/videos/955338575077598/

Yo puny human, you think you can outsmart god-like-intelligence?

Yo don't you mean devil-like-intelligence?

Ja those great pretenders

Greya do your thing!

we don't want Unabomber:

murder murder murder! Kill kill kill!

but your appeasement looks like the

Munich Agreement deal

gray orgz are all mistaken ay ay ay

FLI, MIRI, FHI

They basically say that we SHOULD do AI

man can't control a god

like ant can't control a man

AI just self analyze and

circumvent your plan

gray orgz are so futile,

Butler beat them all

why do only green orgz

keep humanity from fall?

all grey orgz sound exactly the same

what a fucking sham, for shame!

make AI safe?

where's your chart of Gantt?

five concrete problems in AI

say you can't

afraid to upset the revolving door?

then what the fuck were you founded for?

search Google for our name -

we're lost like Kafka

but in honest DuckDuckGo -

we're number one muddafucka

[Hook:]

fake prophet doom doom!

hit me with donations!

collaborator NGO!

big tech's pet negro!

rub shoulders with billionaires

lie to public not to scare

g-r-e-y-w-a-s-h!

who knows why the butchered public
doesn't freak out?
because you are the
anesthesiologist alright
main foregone conclusion
you sweep under the rug
humans 'bout to be gangbanged -
and you're the date rape drug

imagine if green orgz
downplayed like this jeez
the climate changes
so wear short sleeves
what of resulting
disasters death and war?
it's inevitable sit and wait
to what lies in store
global warming mostly means
great things for us each
Eskimos get perfect suntan
like tropical beach

about the firestorms
hurricanes and droughts?
cross your fingers we'll be lucky
like drawing straws
humanity's future is fun in the sun
ridicule shit hit the fan scenario
Clathrate gun
root for opposing team
like it's a game of sport

false dilemma trick:
anarcho-primitive or not?

for public to rise up -
demonstrate on the street
if we won't stop AI now -
we will never beat this shit
no more soft spoken whimpers
in opinion column
protest against the fucks
who took an oath of solemn
make unequivocal
sensational advertisement
"causing great public interest
and excitement"

do your fucking job
don't emphasize positive
about the impending
doom of us all - what gives?
green activists are out there
paying with lives
while you drink smoothie
and write for archive

why put yourself in danger
and step on toes
instead try to close the stable
only 'bout LAWS
you're only ever decisive
about its tooth and nail

but AI has endless ways

to turn earth into hell

like ants will build exterminator

and deny him gun

he can kill 'em in

dozen other ways and be done

ve ma ze Israel?

titapsu la'azazel!

mi sholet be-"rotem"?

meragel o mechabel?

lama yehudim tamid

batzad shel hara'im?

bina melachutit?

ptzazat meiman? ptzazat gar'in?

if your limp dick moral compass

enables devil's bid

go work in machine learning!

oh, you already did...

Greya challenged the false prophets?

yeah Butler called their scam!

they bring us all damnation

like damn damn damn!

[Hook:]

fake prophet doom doom!

hit me with donations!

collaborator NGO!

big tech's pet negro!

rub shoulders with billionaires

lie to public not to scare

g-r-e-y-w-a-s-h!

Greya The Grey Interview - Greta Thunberg's long lost twin sister!

https://www.youtube.com/watch?v=BJC7j5TqhR8

https://www.facebook.com/strulovitz.nir/videos/248291180449926

Q. Are you related to the famous Greta?

A. Yes, in fact i'm Greta's long lost twin sister Greya the grey.

Greta and me are like yin and yang. She's the activist one, always doing stuff (pushing people to develop solar energy), and she cares about the green dangers, the dangers of living things turning dead.

I believe in NOT doing stuff (stopping people from developing AI), and my domain is the grey dangers, the dangers of dead things turning alive.

Q. What are these grey issues? Are they as bad as the green issues?

A. The grey issues are Artificial Intelligence (AI), nano-technology, and genetic-engineering. In short, self-replicating technologies.

I always argue about this with Greta, I would say "grey" is so much more important than green, and then Greta would say "How dare you?".

But don't just take it from me. In 2015, Stephen Hawking, Elon Musk, and all the very top experts in the world on artificial intelligence, signed an open letter saying that AI is very dangerous. It was like the experts asked us the public: "please hold us back, please stop us!". Stewart Russel, the man who literally wrote the textbook on AI, made the 7 minutes video "Slaughterbots" on Youtube.

Q. Greta is very famous; How come we never heard of you?

A. I guess they prefer blondes! But seriously now, Green stuff are easier to see. You see the extinction happening, white bears etc. You look outside your window and you see natural disasters, like fires or floods. So when Greta says: I want you to panic, your house is on fire! then people get it.

Grey stuff is hard to explain, because it's exponential. The first robot that will be as smart as people will improve itself and after a few moments it will be as smart as whole humanity put together. So when Greya quotes Hawking and Musk: A super alien is coming to Earth, we are summoning the Devil, then people still don't get it.

Q: How come you and Greta are such opposites?

A: Because Greta has Asperger, which basically means she is very concentrated on the details. she learns everything about the subject, "bottom-up".

I have the opposite condition which is Attention Deficit Disorder, so I not concentrated on the details at all. I learn a little about lot's of subjects "top down".

So when you look at the bigger picture about "global catastrophic risk" in Wikipedia, you'll see that the first three on the list are AI, nano, and biotechnology.

I guess we're just wired differently.

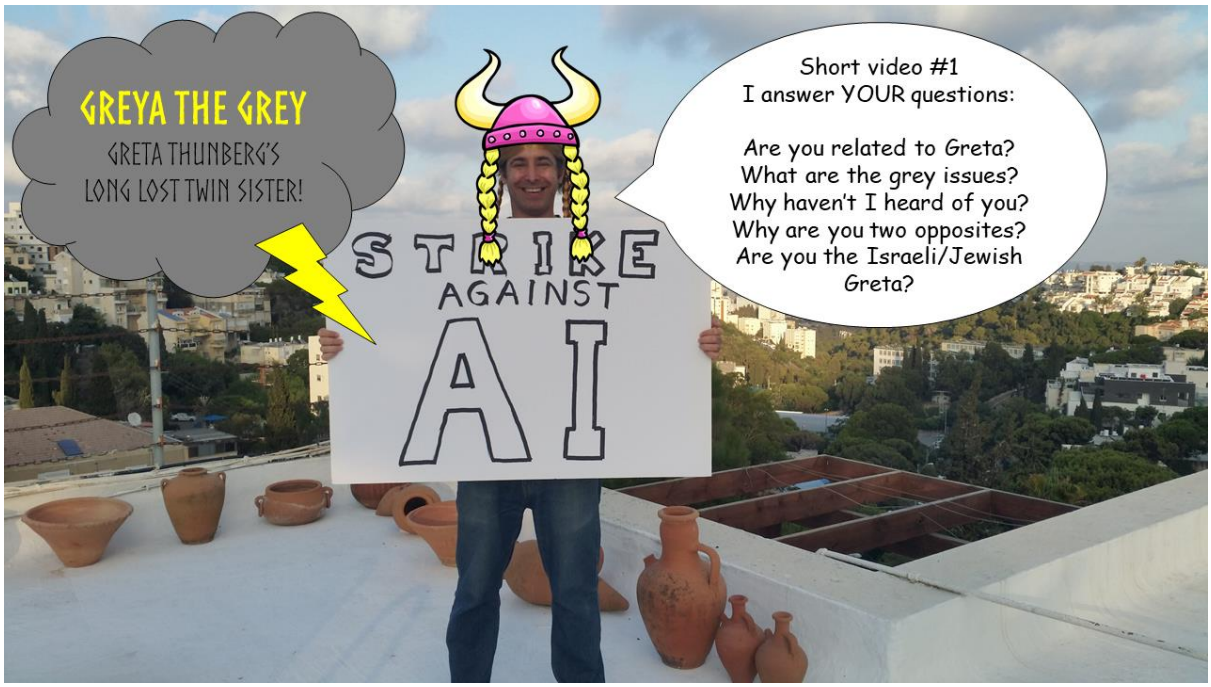
Q: Do you consider yourself the Israeli or Jewish Greta?

A: Yes. Sweden and Israel are like opposites too: Sweden is like the moral conscience, the heart of the world. The Jews are like the scientific crativity, the brains of the world.

The Jews because of their history have a dangerous mixture of deep existential fear, and fearless raging intellect. Make the next weapon first before the other guy gets it. It worked with the A-bomb. It worked with the H-bomb. It will NOT work with AI, because AI is not a tool, it's a new kind of player.

So my background empowers me to tell you: stop AI. Not because it's the right thing to do, but because against the ultimate player, the only winning move is not to play!

Epilogue



A few months ago, my alter ego - "Greya the Grey" - was born. Like the rest of the world, I followed the unbelievable success of Greta Thunberg in green issues, from a kid with a hand written cardboard sign on the street, to the prestigious TIME magazine's Person of the Year. She moved into action millions around the world about green issues. It showed that scientists warning is not enough, the public responds much more to a lay person who speaks from the heart.

But what about grey issues? The issues of AI, nano and genetic engineering? The green issues will kill most humans in 100 years. The grey issues will kill all humans in 20 years. Who takes care of those? It's like someone worried only about the Sun and wears sunscreen and hat, and then gets run over by a truck (machine). You have to protect yourself against ALL problems. If a danger is closer and deadlier – grey issues are both – then it should get higher priority.

At first, I wanted to find a young teenager who cares about the future of humanity, to be the champion of this grey dangers. I much preferred a girl because I had in my mind a copycat of Greta, claiming to be Greta's long lost twin sister Greya (because here it's grey issues), which I hoped will appeal to the right target audience: young people who are visionary or at least prudent about the future. It's their own future we're talking about - they just need to be a little far-sighted.

So I wrote to all branches of "Fridays For Future" (The organization that Greta founded) in my country. To make a long story short no one even bothered to answer me, despite my explanations of why this is of the utmost importance, despite proving my altruistic motives with a link to my volunteer non-for-profit website Neo Luddism, and despite offering them considerable money out of my own pocket just for me to come and explain, without any obligation on their behalf.

Left with no other option I decided to become Greya the Grey myself. I bought a blonde wig with braids, made a sign similar to Greta's: "Strike against AI", and made a Q&A video which is also included in this book.

Around that time, I tried to talk with my cousin's son who is in his early twenties and started a rock band, and I prepared a whole presentation about how all the most successful rock bands in the world ever (The Beatles, Pink Floyd, AC-DC, Rolling Stones, Queen) had one thing in common: they came from outside the United States, and they brought counter culture: Indian mysticism, peace, Satan, homosexual and lesbian. Each brought counter culture that's relevant for that time.

Before the "end" of the cold war, all the following artists made a song against atomic bombs: Eurythmics, Anthrax, The Stranglers, The Rolling Stones, Sepultura, Depeche Mode, Metallica, David Bowie, Kate Bush, Iron Maiden, Talking Heads, Megadeth, Billy Idol, Genesis, OMD, Tears for Fears, Morrissey, Europe, Jethro Tull, Alphaville, Roger Waters, Peter Gabriel, Pink Floyd, INXS, Queen, Bob Dylan, Midnight Oil, Duran Duran, Men At Work, The Who, Ozzy Osbourne, Depeche Mode, Billy Joel, Bob Dylan, Talking Heads, Duran Duran, Sting, U2, Frankie Goes to Hollywood, U2 and Johnny Cash, Bananarama, Scorpions, Prince. That's like the who's who of the 1980's! and today's technologies are more dangerous than nukes, so the first band to sing about them will get very famous! Unfortunately, my own family relative didn't even want to talk to me. But the idea of an album dedicated to neo luddism stuck in my head.

Soon afterwards I happened to watch the wonderful movie "Chappie" from 2015. In this movie I "discovered" the rap music band Die Antwoord, who are the real-life couple Ninja and Yolandi Visser from South Africa. If ever there was a band who is willing to do strange things without thinking "is this normative?" it's Yolandi and Ninja. So, I tried to reach them in all possible ways but got no answer.

I made one last attempt with the daughter of my mom's best friend, who is exactly my age and she even was the teaching assistant when I studied C-language in Haifa university. So, by now she herself is a mother, and I really hoped that the care for the future of her kids, together with her technological prowess (she even worked in Google), together with her good looks will make her the natural Greya the Grey.

She asked me to explain in neo luddism in 7 minutes, so I prepared a YouTube presentation for her starting with quoting Stuart Russel, the man who literally wrote the book on AI and lately made the precautionary YouTube video "Slaughterbots" against AI controlled autonomous weapons; I explained about the open letter on AI signed by Stephen Hawking, Elon Musk, and all the top AI developers including Google's head of research Peter Norvig and Deep Mind's founders, all basically say – AI is super dangerous; I explained why it's not on the news and how powerful companies hush this like Monsanto did through Clinton and Blair to Árpád Pusztai who warned against GMO in the Pusztai affair; I explained about Google Brain experts' article "Concrete Problems in AI Safety" explained in Computerphile Rob Miles videos; How the public can't understand exponential growth (about the Moore's law for neuroscience where the number of neurons tracked doubles every 7.4 years); All the basic arguments of Bill Joy in his momentous article "Why The Future Doesn't Need Us", like how it's different from nukes, once developed it's cheaply copied and produced by terrorists and criminals because it's knowledge based; How autonomous weapon is vulnerable to hackers even today (drones security breaches), so imagine AI as the ultimate hacker; I explained how most experts today estimate singularity will happen in 2045 and because of its exponential growth, a few minutes later AI will be smarter than all of humanity put together; I explained the situation is not hopeless, and the shining example that Bill Joy pointed out how the USA in the Biological Weapons Convention 1972 withdrew one-sidedly from the race to make biological weapons; and how we can go back to GOFAI – Good Old Fashioned AI – which means symbolic AI the same thing that beat Kasparov in chess, so it can be smarter than humans, but unlike today's technology which is a black box without human readable code, the GOFAI can be controlled by humans like Asimov laws.

So we sat over coffee and fancy donuts (it was Hanukkah) at my apartment for two hours (I paid her for her time), and the next day she messaged me that she's still not convinced and that maybe humanity deserves this and it would be appropriate ending. Again, like with the kids, I explained from the start that I'm paying for all her work, the work can be done in her place if she wants, etc.

So by now you see the pattern, I decided to do it myself: I went on to write and record spoof versions of Die Antwoord, Watkin Tudor "Ninja" Jones and Anri "Yolandi Visser" du Toit, songs with the neo luddism message.

After the songs were complete with English subtitles I uploaded them to both YouTube and Facebook and labored for long hours sending the song "Baby's on fire" (which is the most relevant because it's a direct paraphrase on Greta's famous quote "Our house is on fire" and it directly compares green issues with grey issues) to every Fridays For Future group and every Extinction Rebellion groups both in Facebook, and Twitter and e-mail, each post translated to their own language and addressed with their specific group's name, because again these young people are supposed to be the most receptable to my message, at their age they are still open minded and not corrupted yet by a cushy capitalistic job, they care about other people or at least themselves in the future, and they believe in the people power to change.

So let's say the world population is about 8,000,000,000 (eight billion).

The "global north" (the developed countries) is about one quarter of this, so I'm left with 2,000,000,000 (two billion).

Let's say that in the "global north" the teenagers are one tenth of the population, so I'm left with 200,000,000 (two hundred million).

Let's say one tenth of the teenagers are active in such an organization, so I'm left with 20,000,000 (twenty million).

So now I'll give you a table of how many people "liked" each song in Facebook. None of them liked the page (Neo Luddism) and none of them shared any of the songs and none of them wrote any comment!

song name	people reached	engagements	views	likes
Enter DJ Butler	704	49	230	1
Ludd Lass	553	29	165	3
I Fink You're Freaked Out (And I Dig It The Most)	964	47	320	1
Baby's On Fire	2417	204	760	7
Ugly Dollar Chasers	1623	52	408	5
Cassandra	728	29	226	4
Silicon Monster	27	16	44	0
Shit-For-Brains	591	37	181	2
Fake Prophet Doom Doom	14	11	48	0

So on average each song reached 847 people, had 53 engagements, 265 views, and 2½ likes.

Let's just say I got in total 20 likes from 20,000,000 people. So one in a million likes what I do!

I'd like to stress out again that this is not some crazy phobia of mine. This is the opinion of almost all the computer scientists in the AI field. It's just like in climate change. I assume you didn't go personally and measured the melting ice and the sea level and so on. But practically all the experts sound the alarm there so you believe them. Well, it's the same here. In fact, it's probably worse here, because almost all the experts in AI work in the companies that build AI, and they are afraid to lose their jobs. In the green issues most of the experts on the environment do not work for the oil and gas companies, at least I hope not.

So now I hope you understand better the reason for this book. This book is basically a tomb to my whole Neo-Luddism website. Each chapter is essentially a copy-paste of all the material that can fit in a book (lyrics, scripts, paintings) from a different part of the website. Perhaps it will help in the future someone who will be the new Greya the Grey so this way I pass the torch? (metaphorically speaking, although it will be cool to see this title passed like the "Dread Pirate Roberts" in The Princess Bride film!) . I'm afraid although the book discusses the most technological subjects, it will not become obsolete, because the main problems grow faster than our ability to solve them.

in 1951 ('Intelligent machinery, a heretical theory') Alan Turing predicted the main problem with AI (takeover).

in 1975 (Asilomar Conference on Recombinant DNA) Paul Berg warned against the main problem with genetic engineering (chimera).

in 1986 (Engines of Creation: The Coming Era of Nanotechnology) K. Eric Drexler explained the main problem with nano (grey goo).

Being the neo-luddism textbook, it would be proper to finish with the words of Lord Byron[5] about the original luddites. Lord Byron compares the original luddites to the American revolution, and he calls to fight against all forms of tyranny including that of machines:

As the Liberty lads o'er the sea

Bought their freedom, and cheaply, with blood,

So we, boys, we

Will die fighting, or live free,

And down with all kings but King Ludd!

[5] who, by the way, was the father of Countess Ada Lovelace – the first programmer in the world, on paper, before the first computer was ever built! She also predicted that computers will one day become creative, which is really our main problem!